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PRESENT INSTITUTIONAL FACILITIES FOR CARE OF CHRONIC DISEASES*

In recent years so much attention has been given to the study and care of acute infectious diseases that the problem of chronic diseases has almost been left alone to work out its own solution. But the time has come when we are beginning to recognize that the patient who is obliged to spend several months or even years in an institution of some sort should also be given the advantages of modern facilities. This is not the case, however. At present, many are harbored in institutions, such as almshouses, where they are unable to be cared for properly and are left to die. A great deal remains to be done in the way of improving the institutions for the care of chronic patients throughout the country.

WITH the gradual control of the acute infectious diseases, chronic diseases are contributing more and more to the invalidism of the human race. The problem of the proper institutional care of sufferers from such diseases is thus becoming more and more urgent.

The following investigation of the present institutional facilities for the care of patients suffering from chronic diseases was made in response to a widespread feeling that the problem has not as yet received the recognition that it deserves.

As was pointed out by one of us in a previous communication, a chronic patient may be described as one who requires hospital care for a period of from three months to several years. From the point of view of institutional care, these patients may be grouped into three categories: class "A"—those requiring medical study for diagnosis and treatment; class "B"—those requiring nursing care only; class "C"—those requiring custodial care only.

The management of each of these groups is a problem in itself and each class places different demands on institutional resources. It is most important to recognize that patients do not remain in one class indefinitely. Thus a patient may be admitted in class A and in the course of months improve sufficiently to become a purely custodial case. On the other hand, it is just as common for a patient in class B or in class C to develop some complication or exacerbation of his illness which places him in class A. Every class C patient who dies is, during his terminal illness, a class A case. The fact cannot be overemphasized that the type of treatment demanded by the different groups varies considerably.

The proper care of a class A patient demands a complete hospital organization with a resident staff, an attending staff on which all of the specialties are represented, complete laboratory, x-ray and operating room equipment, skilled nursing and dietetic management. Class B patients require much less specialized attention but should command an excellent nursing service, controlled by a conscientious medical staff. Class C patients need the least care. As the classification implies, the treatment of this last group is largely custodial in character. These patients are retained in an institution not because they require hospital care but because poverty makes home care impossible. The problem is economic, not medical.

*This is the first of a brief series of articles dealing with the institutional care of chronic diseases prepared by a special committee of the editorial board composed of Dr. Ernst P. Boas, chairman, director, Montefiore Hospital for Chronic Diseases, New York, and Dr. A. K. Haywood, superintendent, Montreal General Hospital, Montreal, Canada.

All of their wants are supplied with due regard to their respective disabilities by proper sleeping and living accommodations and food. Thus, many will require wheel chairs and all of the structural institutional facilities which such implies, while many will need the assistance of attendants in dressing, bathing and eating.

102 Institutions Surveyed

At the present time, sufferers from chronic diseases are harbored in several classes of institutions—in private homes for incurables, in homes for the aged and infirm, in hospitals for chronic diseases, and in almshouses. A complete survey of all such institutions would manifestly be a large and time-consuming undertaking. The following procedure was, therefore, adopted: A list was made of all of the private institutions which, from their name, appeared to be of the type in which we were interested. After a considerable search, 102 such institutions were listed in the United States and Canada. The following questionnaire was sent to every institution on the list:

1. Bed capacity.
2. Type of patient.
3. Length of stay in institution.
4. Method of admission.
5. Who accepts cases for admission?
6. Size of visiting staff.
7. What specialties are represented?
8. Frequency of visits.
9. No. of interns or residents.
10. Type of nursing staff:
    (a) No. of graduates.
    (b) No. of undergraduates or attendants.
    (c) No. of ward maids.
    (d) No. of orderlies.
    (e) No. of pupil nurses.
11. Have you a training school for nurses?
12. Have you a dietitian?
13. Are there provisions for special diets?
14. Is there an x-ray department?
15. Is there a dental department?
16. Is there an operating room?
17. Is there a mechano-therapeutic department?
18. Is there a hydrotherapy department?
19. Is there a social service department?
20. Is there an occupational therapy department?
21. What are the laboratory facilities?
22. What is your percentage of autopsies?
23. Are there separate accommodations for hospital and for custodial cases?
24. Are careful clinical records kept?
25. Are these records carefully cross-indexed in the record room?
26. Additional comments.

A total of forty replies was received. Fifteen institutions had to be eliminated because they were strictly homes for the aged. There remain, therefore, twenty-five replies to questionnaires, from which some conclusions as to the facilities of these institutions can be drawn. Of these twenty-five, six are public institutions, of the nature of municipal almshouses, with a total bed capacity of 7,217.

Three of these, on paper, at least, show an adequate organization with proper facilities for the care of their patients. The attending staff members make daily visits, the resident and nursing staffs are apparently adequate, and in all three there is a school for nurses. These same three institutions each have an x-ray laboratory and dental departments, with a sufficient number of autopsies and provisions for the proper keeping of clinical records. It is to be noted, however, that all three of these institutions admit a certain number of acute, as well as chronic cases, and have thus been compelled to improve their facilities.

The three other public institutions demand only occasional visits from the visiting physicians, have an inadequate number of graduate nurses to act as supervisors, make scanty provision for dietetic treatment, and have primitive laboratory equipment.

Resources Very Limited

The resources of the private institutions are still more limited, although, judging from the tenor of many of the replies received, the superintendents and directors of these establishments feel that they are doing their full duty.

Of the nineteen remaining institutions, five have appointed specialists, such as neurologists and orthopedists, to their consultation staffs. With but three exceptions, the visiting staff makes only occasional visits while there are resident physicians in but very few of the institutions.

The nursing staffs are usually insufficient, not in numbers alone but in quality as well. Thus, an institution of 265 beds has only three graduate nurses, twenty-eight undergraduates and twelve ward maids. An institution of seventy-five beds, which cares for patients with advanced cancer, has only two graduate nurses. Another home for incurables, of 300 beds, has only four graduate nurses. This is rather typical of the prevailing conditions.

It has been our experience that this is an altogether insufficient number of graduate nurses, even for chronic patients. It is very difficult to obtain satisfactory nursing service from undergraduates and from attendants. Very many of this class of women lack the sense of responsibility and the conscientiousness that is so essential to the adequate care of patients. Chronic patients are often very trying, and their management calls for particular skill, tact and forbearance on the part of the nursing staff. An efficient and sympathetic nursing service must be built around a large nucleus of graduate nurses.

Only two of these institutions have established training schools for nurses and these two represent the highest standards that have as yet been reached in the care of chronic patients. Only one has an x-ray department, two have dental departments and three provide operating rooms. A department of physiotherapy, which plays such an important role in the treatment of chronic patients, is represented in only two of the twenty-five institutions. Occupational therapy is provided in five institutions, a social service department in six. Laboratory facilities are practically non-existent in all of these institutions, and in only one private hospital and two public ones are there any autopsies performed.

Separate accommodations for hospital and for custodial cases are found in but very few of the institutions, while in most of them no adequate clinical records are kept.

Survey Gives Graphic Picture

This brief survey, incomplete as it is, gives a graphic picture of the present state of institutions that are devoted to the care of chronic patients. It is apparent that all of them accept the premise that their patients are incurable, that nothing more can be done for them, and that their only function is to provide a home where these unfortunates may linger until they die. The scientific study of disease is completely ignored, and the importance of treatment of acute intercurrent illnesses is minimized.

There is only one institution in our knowledge that is facing the problem in its broadest aspects. At this institution which cares for 550 patients, the custodial cases are segregated from the hospital cases. Patients are not placed in the custodial class until every effort for their rehabilitation has been made. As soon as a custodial patient becomes ill, he is re-transferred to the hospital service. There is a complete visiting staff organization, there are resident physicians and interns; there is a nurses' training school with twenty graduate nurses as supervisors; there are adequate operating rooms, x-ray, physiotherapy, occupational therapy, dental and laboratory facilities, and careful clinical records are kept. A dietitian, with three assistants, is employed, and great attention is paid to special diets. There is also a social service department.

This survey covers only one aspect of the problem of the institutional care of patients suffering from chronic diseases. A large number of these unfortunates are cared for in almshouses. The statistics in regard to the almshouses were obtained from the report of the United States Census of 1910 in the book "Paupers in Almshouses," published in 1915 by the Government Printing Office. The analysis of the 1920 census is not yet available.

Of 84,198 paupers enumerated in almshouses of the United States in January 1, 1910, 53,619, or 63.7 per cent had a serious physical or mental defect. (See table 1.) The bedridden, crippled, maimed or deformed, form a larger percentage of those admitted during the year than of those present at the time of the census, because of the fact that they die off so quickly after admission.

Of all of the paupers in almshouses, 15.4 per cent were able-bodied and 44.1 per cent were unable to do any work whatsoever. Their death rate was 207.7 per thousand enumerated. Deaths were due to tuberculosis in 17.9 per cent of the cases.

Of paupers enumerated January 1, 1910, sixty-five per cent had been in the almshouse for more than one year; 35 per cent had been there five years or more.

Table 2, giving the causes of death, demonstrates that the occupants of almshouses are, to a large extent, of the same type as those in homes for incurables. That it is not only the aged who seek relief in almshouses and who succumb, is shown by the table giving the age distribution of paupers who died. Seven thousand eight hundred and three of 17,486 were under the age of sixty.

TABLE I.—DEFECTIVE PAUPERS IN ALMSHOUSES, 1910.

DEFECT	NUMBER		Percent of total defective	
	Enumerated on Jan. 1.	Admitted during the year	Enumerated on Jan. 1.	Admitted during the year
Total defective:	53,619	32,519	100.0	100.0
Insane	3,518	1,647	6.6	5.7
Feeble-minded	13,238	4,406	24.7	13.6
Epileptic	2,202	804	4.1	2.5
Blind	3,375	1,035	6.3	3.2
Deaf-mute	918	226	1.7	0.7
Crippled, maimed or deformed	13,753	9,872	25.6	30.4
Old and Infirm	17,202	10,799	32.1	33.2
Bedridden	2,420	5,538	4.9	17.0
Paralytic	4,727	-----	8.8	——

*The sum of the numbers reporting each defect exceeds the total number of defectives by 7,934 among the paupers enumerated on Jan. 1, 1910, and by 2,010 among the paupers admitted during 1910, the reason for this excess being that some paupers reported two or more defects.

Almshouse Facilities Inadequate

If the provisions for chronic patients are inadequate in the private homes for incurables, it is self-evident that they are all the more so in the innumerable small county almshouses scattered throughout the country. It is true that in a few of the larger states, the large municipal almshouses have made some attempt at meeting their

TABLE 2.—DEATHS, 1910.

CAUSE OF DEATH	Among paupers in almshouses in 1910	Percent distribution by causes	
		Among Paupers	In general population of registration states
All known causes	17,486	100.0	100.0
Typhoid fever	113	0.6	1.5
Dysentery	136	0.8	0.4
Erysipelas	77	0.4	0.3
Tuberculosis of the lungs	3,136	17.9	8.8
Other forms of tuberculosis	141	0.8	1.6
Cancer and other malignant tumors	695	4.0	5.2
Diabetes	61	0.3	1.0
Diseases of the nervous system	2,194	12.5	10.0
Cerebral hemorrhage and softening	726	4.2	5.3
General paralysis of the insane	55	0.4	0.4
Other forms of mental alienation	40	0.2	0.2
Epilepsy	130	0.7	0.3
All other diseases of the nervous system	1,222	7.0	3.8
Organic diseases of the heart	1,439	8.2	9.7
Diseases of the arteries (arteriosclerosis, etc.)	512	2.9	1.5
Pneumonia (all forms)	1,071	6.1	6.5
Diarrhea and enteritis	211	1.2	7.8
Nephritis (Bright's disease)	1,071	6.1	6.5
Senility	1,818	10.4	1.7
Suicide	57	0.3	1.0
Violent deaths (suicide excepted)	325	1.9	5.8
All other causes	3,576	20.5	29.1
Cause unknown or ill-defined	845	4.9	1.5

problems, but it is well-known that even in these institutions the budgetary allowance is too limited to allow of appropriate organization. It has been said that "the county almshouse is a hospital with the hospital part left out." Yet the appreciation of the need for hospital accommodations for many almshouse patients is not a new one. In 1828, when plans for the new Philadelphia Almshouse were being prepared, it was pointed out by the responsible committee that the hospital should be adjacent to the almshouse and again, in 1888, when there was a movement on foot to move the almshouse away from the hospital, Mayor Fitler, in his annual message, pointed out that nearly all almshouse inmates were proper subjects for hospital care.

What remedies may be sought to improve the institutions devoted to the care of chronic patients? It seems clear that the first step must, of necessity, be a widespread educational campaign that will reach the superintendents and directors of the existing institutions caring for sufferers from chronic diseases. Probably the best means to accomplish this would be the establishment of a section of the American Hospital Association for chronic institutions, and an earnest endeavor on the part of those interested to recruit for that section the leading institutions in the United States. This section could then formulate and define the necessary institutional facilities demanded for the adequate care of chronics. The prestige of the American Hospital Association would lend weight to the standards which they might adopt.

The reform of the almshouses will be a still more difficult undertaking. It, too, will require the formulation of standards by a representative body, such as the American Hospital Association, which can command a respectful hearing and win the support of the responsible authorities.

To provide properly for the inmates of almshouses, it will be necessary to make a radical change in the provisions for their care. It is impossible to expect the small county almshouses, with limited budgets, to furnish adequate facilities for their inmates. Every institution caring for chronic cases must be regarded as composed of three elements: 1.—A hospital through which every case must pass on admission for thorough physical examination and study with the aid of all of the accessory departments of a general hospital, such as laboratories and the x-ray department, and for prolonged medical treatment when necessary (Group A); 2.—a nursing home for chronic invalids (Group B); 3.—a custodial institution for those economically unable to secure an adequate home for themselves (Group C). The institution must recognize that any patient may at any time pass from one group to another and that all B and C cases pass into class A before death.

Central Institutions Needed

Provisions, therefore, will have to be made for large central institutions, probably under the direction of the state governments, supported by a pro rata subsidy from the different counties. Such institutions could be conducted along the proper lines and could give to their inmates the medical, nursing and custodial care which they demand. The development will be analogous to the movement which removed the insane from the almshouses and assembled them in large state hospitals.

PAUPERS WHO DIED IN ALMSHOUSES IN THE UNITED STATES IN 1910.

Under 5 Years	332	55-59 Years	1,245
5-14 Years	69	60-64 Years	1,624
15-24 Years	722	65-69 Years	1,699
25-29 Years	646	70-74 Years	1,922
30-34 Years	624	75-79 Years	1,786
35-39 Years	820	80 and over	2,652
40-44 Years	834	Age unknown	330
45-49 Years	977		
50-54 Years	1,204	Total	17,486

DR. MACEACHERN LEAVES VANCOUVER GENERAL HOSPITAL

Dr. M. T. MacEachern, president-elect of the American Hospital Association, has resigned as general superintendent of the Vancouver General Hospital. His resignation was accepted with great regret by the board. During the past year Dr. MacEachern has been on leave of absence making a survey of nursing conditions in Canada for the Victorian Order of Nurses.

WATTS HOSPITAL—A PIONEER OF THE SOUTH

By ALBERT S. KENDALL, of Kendall, Taylor & Co., Architects, Boston, Mass.

THE city of Durham, North Carolina, has been fortunate in its hospital history and experience. The hospital idea in most communities is born in the inspired determination of some individual or group to add something to the service equipment of the community. Durham is no exception, but the fact that it was among the earliest to find its hospital needs taken care of lends prominence to the Watts Hospital.

As early as 1890, Mr. George W. Watts conceived the idea of building a hospital in Durham to care for the needs of the people of that city and county. I believe this was the very beginning of the hospital idea in the state, outside of the larger cities. However familiar the town and county hospital is at present, it was then a new idea to be approached with fear and trembling.

Mr. Watts Founds Hospital in 1892

Mr. Watts had the courage of his conviction that a small city had as much right and need of hospital care as the large center and, in 1892, he presented Durham with its first hospital. The pioneer was a small affair on a somewhat restricted lot in the city. It had room for about twenty beds. The new venture lived and grew, and suffered the vicissitudes of pioneers.

The people had to be educated to regard the hospital as a friend and not as a dread enemy. In those days people got well at home, but who knew what might happen in the hospital? The courage of the little group formed by the doctor, staff and nurses was severely tested in those first years, and I imagine that financial assistance to the infant hospital was often necessary. If so, only those close to the work knew of it, and it was given as quietly and generously as the later and larger work.

Continued effort wrought its effect and, after a few years' struggle, the hospital began to grow and to take its place as a factor in the health life of the city. Additions were made which relieved the growing pressure on the facilities of the hospital.

It soon became evident that if the institution was to live up to its purpose and keep its original ideals, it would be necessary for it to grow and increase far beyond the original ideals, even beyond the original dreams of its generous benefactor.

Mr. Watts said, in speaking of this time, that the questions involved in the adolescence of this hospital received long and careful consideration. It was discussed in his family for many months, and the decision reached that since the hospital had been brought into being it must be made adequate to give the people of the county the best possible service.

An Enterprise for Community Service

A new hospital was decided upon, built upon a larger scheme, with broader ideals, ready to meet every demand for years to come and to accept for all time the great opportunity to do good to all the people of Durham.

The architects were called into consultation and set to work to study the possibilities. This they did, and after earnest consideration and not without some trepidation, recommended that the present site and hospital plant be completely abandoned, a new and more appropriate site sought,

The Watts Hospital, general view southeast.

and thereon a new hospital placed which could answer all the demands upon it and grow with the community.

The reasons for this unusual and somewhat drastic step were many but of no particular interest to the reader. Suffice it to say that the old site was being gradually encroached upon and surrounded by the growing city and there seemed to be no good reason why in a country district they should suffer from the necessary and unavoidable evils to which city hospitals fall heir.

Sentiment was hard to overcome, of course, but the broad views of Mr. Watts prevailed and a careful inspection of available sites in and around Durham was made.

Lot of Sixty Acres Chosen for Site

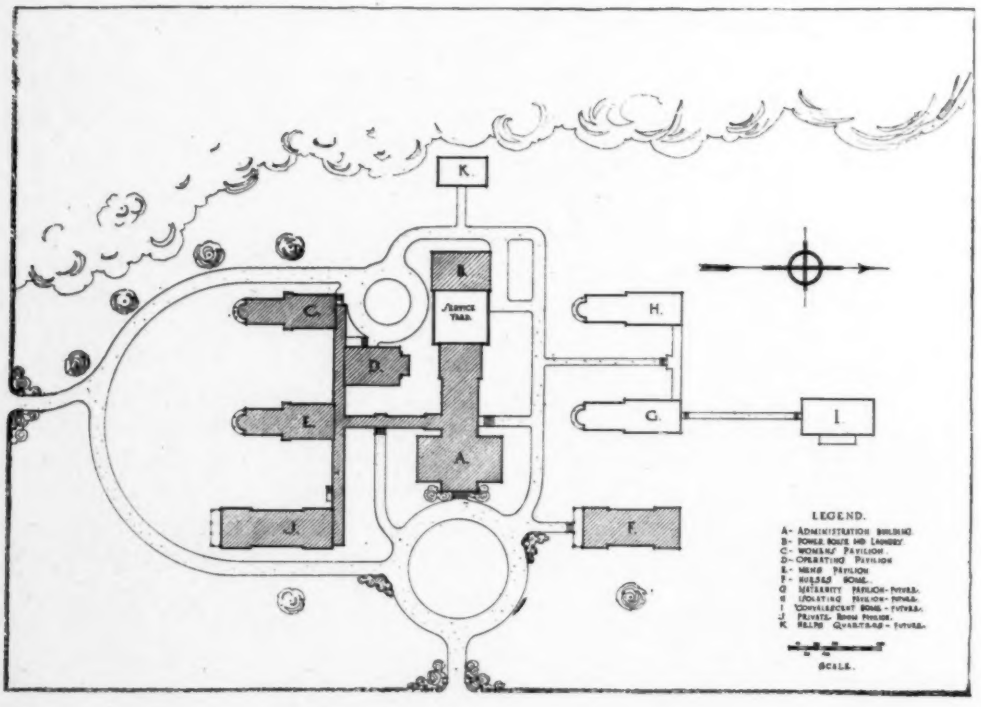
A lot of sixty acres was finally chosen, just outside the city, in West Durham. It overlooks that part of the city, also Trinity College and the surrounding country. Part of the grounds is covered with a splendid grove of oak and hickory which has been turned into a park, and is much used by nurses and convalescents. There is ample room for playgrounds, tennis courts, basket ball field, and other recreational facilities, some of which have been laid out and are in constant use.

With the site in view, work was commenced on the plans, and a group plan laid out. This plan contemplates a series of two-story buildings connected by covered corridors as shown in the diagram plan. Study of the details followed and the results achieved are due to the cooperative efforts of Mr. Watts, the staff and the architects.

Mr. Watts gave unsparingly of his time and strength that the new hospital might represent all that was best and most practicable. The plans were several times changed, added features incorporated, and the scheme grew until it was several times larger than was at first contemplated.

It is quite usual in working out a hospital plan to have new ideas and improvements suggest themselves, but, unfortunately, they often increase the cost of the buildings. In this case all such ideas were given careful consideration and were accepted and incorporated in the plans without regard to the expense. The only question considered was, will the change add to the efficiency of the hospital or to the service it can give to the patients?

Construction was finally started, bringing to an end the long period of study and preparation. The first group of buildings consisted of the administration building, operating building, power house and laundry, and one patients' pavilion, the one marked E, on the group plans.

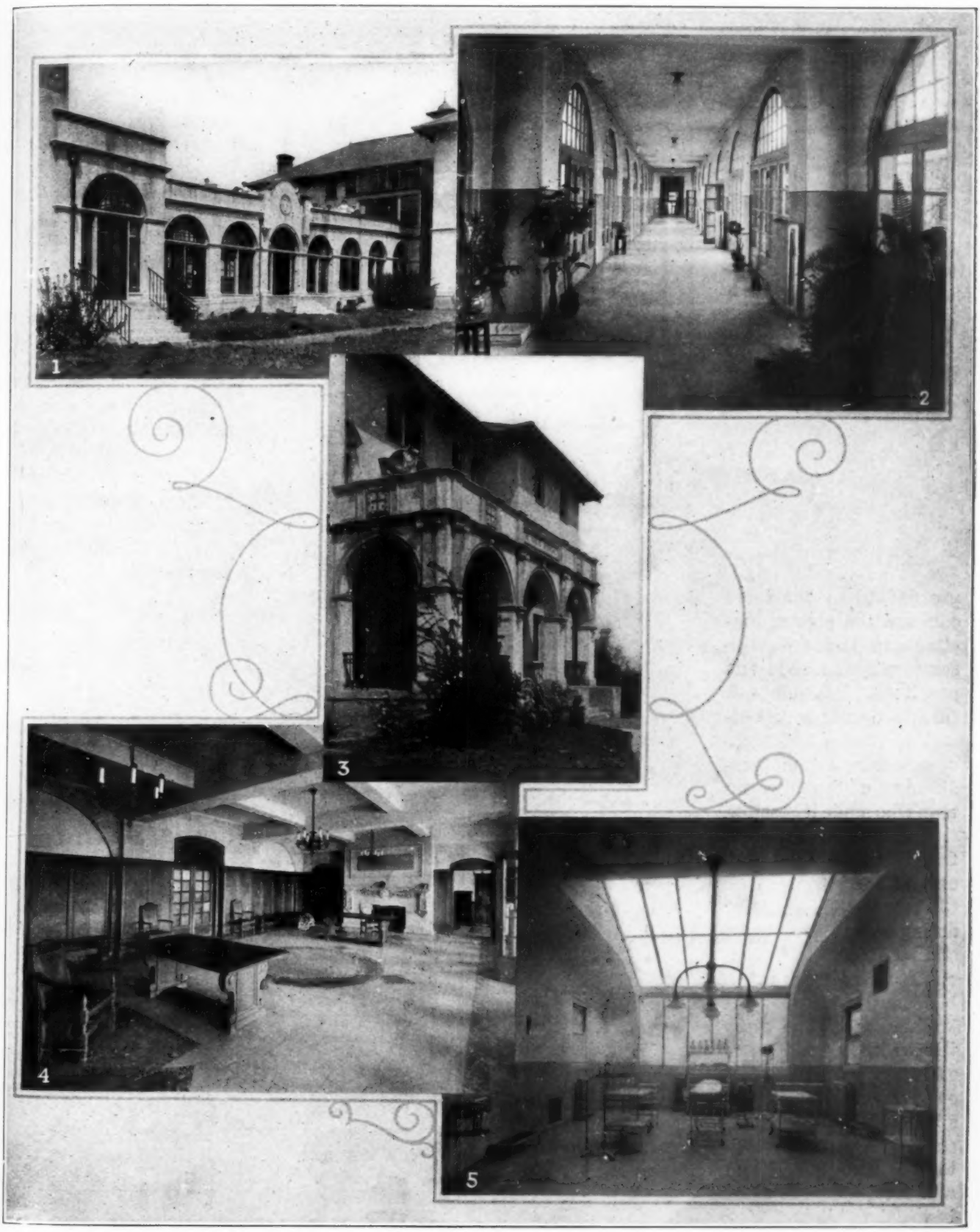


Plot plan.

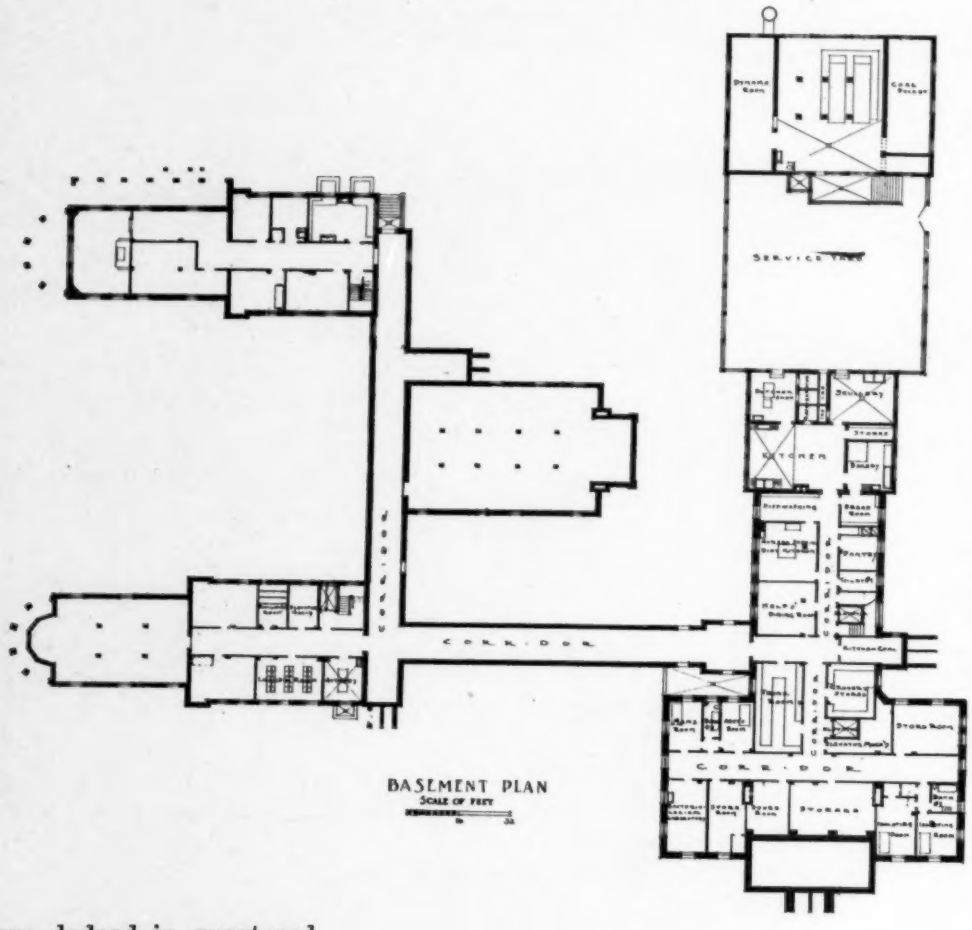
Buildings of Spanish Mission Type

The buildings are of fireproof construction, with brick walls covered with stucco on the outside. The general style is a modified Spanish Mission type, with the characteristic red tile roof. The administration building is entered through an open loggia opening on a large memorial waiting room. This room is beautifully finished in Caen stone plaster with a marble floor. The walls

A FEW EXTERIOR AND INTERIOR VIEWS OF THE WATTS HOSPITAL, DURHAM, N. C.



1. Exterior view of connecting corridor; 2. Interior view of connecting corridor; 3. Main entrance; 4. Waiting room, administration building; 5. New operating room.

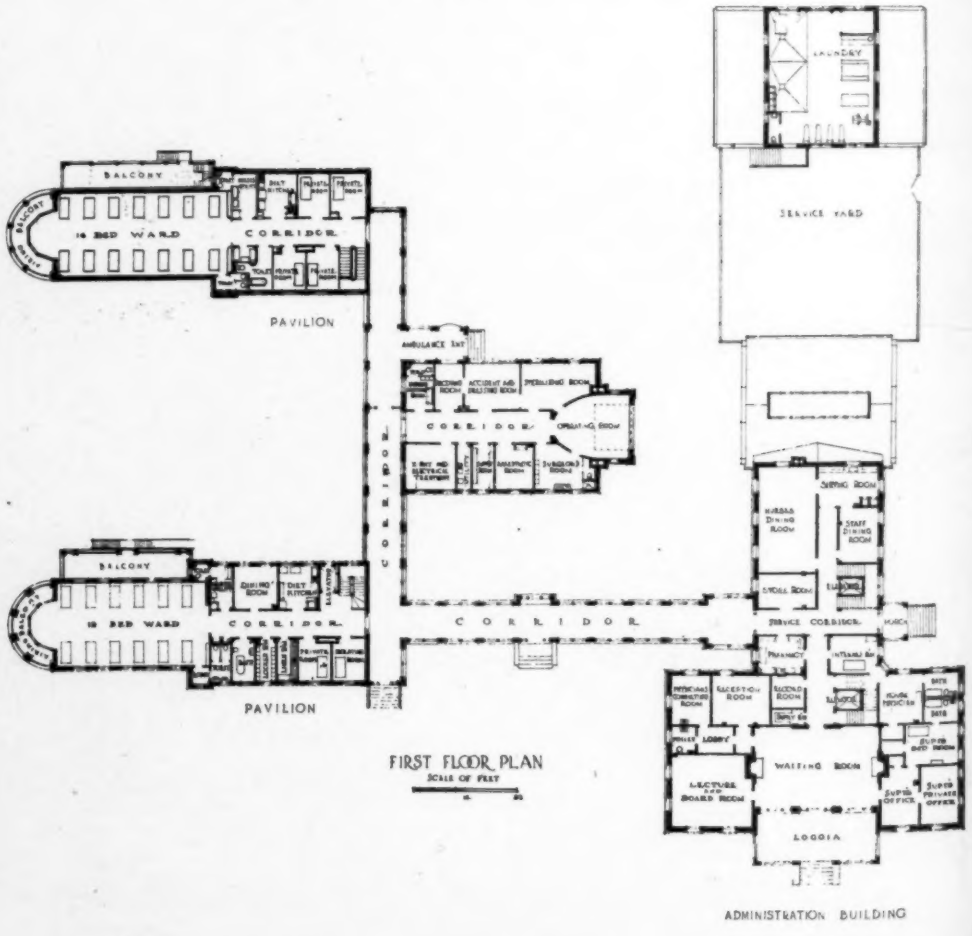


Still further back across a sixty foot service yard is the boiler house with the laundry on the second floor. There are three high pressure tubular boilers, (two were put in place originally), coal pocket and engine room. The laundry is equipped with modern electrically driven machinery and is built with due allowance for expansion.

In the basement of the administration building is a small isolation ward of two beds, and what is doubtless the first pathological and bacteriological laboratory outside of the large cities in the South. Near the main kitchen there is a diet kitchen for the training school and a dining room for the help.

are dadoed in quartered oak and the plaster lunettes are frescoed with some very excellent paintings. The quiet oak furniture adds to the effect of worth and richness, worthy of the splendid aims of the generous man who made it possible.

The rest of the first floor is used for the business of the hospital, and the wing at the rear for dining rooms for nurses and staff. Beyond the administration building, but contiguous, is the kitchen in a one story wing with a monitor, as all main hospital kitchens should be, when possible. Under such ideal conditions it is possible to omit entirely all hoods and overhead piping and have the kitchen free and clear, as full of light as a ward.



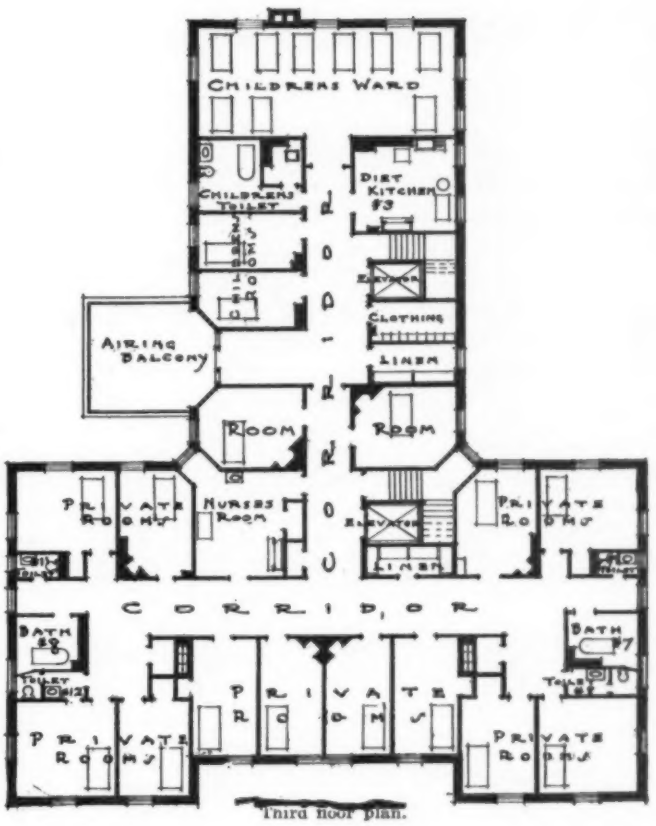
The second floor is devoted to private patients and the maternity department. The private patients' section on the front is adequately isolated from the maternity department by the interposition of stairs, elevator, and nurses' work room. The maternity department has its own elevator, entirely distinct from the private patients' department.

The third floor originally housed the nurses and the help, the latter in the wing; but since the erection of the nurses' home it has been used for private patients and the children's department. Plans now under way for a new building for private patients will make it possible to isolate the children's wards more thoroughly, as of course they should be.

Not counting infants, the administration building will accommodate forty-five patients.

The ward building is of similar construction, but only two stories high. It houses twenty-eight patients, fourteen on each floor. There are two twelve-bed wards and four single isolating rooms. There is a dining room for convalescents, a ward kitchen, elevator and the necessary linen, toilet and work rooms. A solarium at the end and balconies complete the equipment. The building is quite simple in arrangement, but it has many refinements and is altogether an excellent type of ward plan, but much could be added to it which could not be classed as frills.

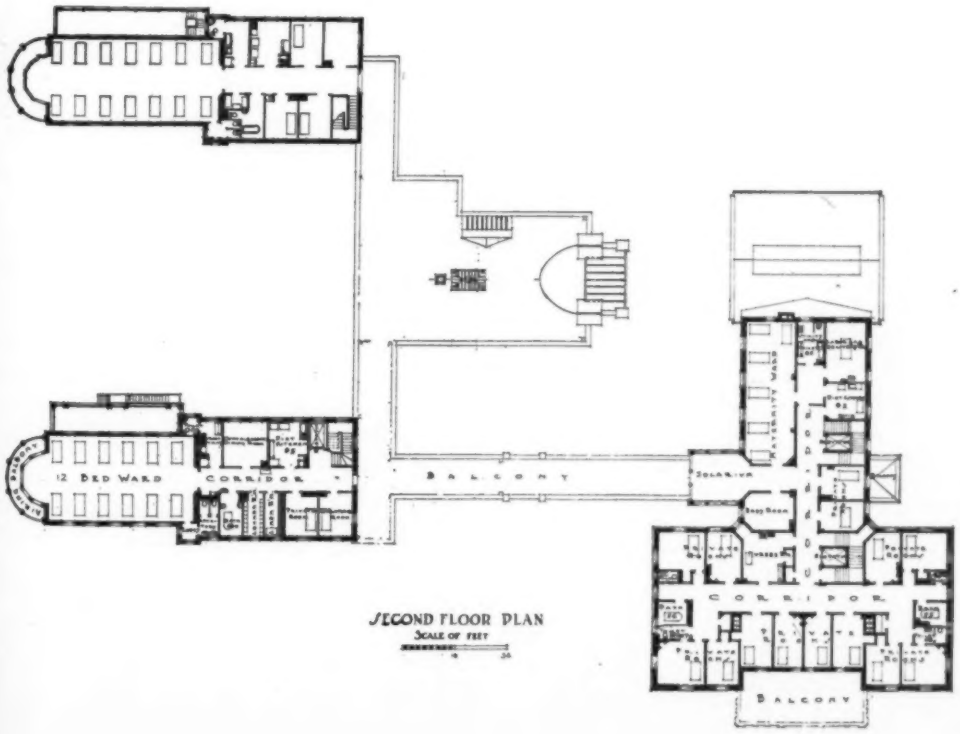
It is interesting, at this point, to compare the plans of the second ward building marked "C" on the group plan, built after the first group had been in use for a year. It shows the changes desired by the staff, after learning from experience what was and what was not essential in the old plan.



Third floor plan.

The changes are briefly: enlarged capacity—the new building accommodates thirty-five as compared with twenty-eight in the old ward. The large wards are enlarged to fourteen beds. The convalescents' dining room is omitted, as experience showed it was little used. Indeed it was soon converted into a two-bed ward in the older pavilion. Owing to a change in the system of linen distribution, the linen room is made smaller and given an inside position. The locker for patients' clothing was relegated to the basement where there was room to spare. This made room for four additional isolation rooms.

The operating pavilion is a one story and basement building devoted



SECOND FLOOR PLAN
SCALE OF FEET

exclusively to surgical, accident and x-ray work. The ambulance entrance is located in the west side opening into a receiving lobby which is adjacent to the minor operating room and accident room. The x-ray room is convenient to the patients coming either from the ward or from the operating rooms. The operating rooms corridor are amply lighted through skylights as well as with generous windows in the wall. The construction is fireproof like all the other buildings, and the walls and floors are of marble, tile, and terrazzo.

The Watts Hospital Nurses' Home.

At the completion of the first group, Mr. Watts presented the hospital to the board of trustees, with these words:—

"To be yours as long as it is used exclusively as a hospital for the sick at which, board, attention, and nursing shall be given free to the indigent sick of Durham City and County."

The year following the opening of the new Watts Hospital, Mr. Watts built the second two-story pavilion already referred to, now used for women patients.

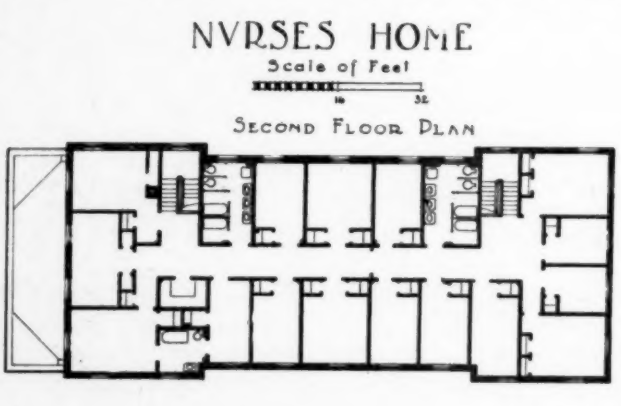
The nurses' home was also built at this time, which greatly relieved the administration building, and gave the training school proper quarters. This building is situated on the site marked "F" on the group plan, where it was originally planned. The building is two-story like the wards and of similar construction. It has single rooms for forty nurses with one or two suites, large reception rooms and a gymnasium in the basement. It is a peculiarity of southern hospitals that the help, being mostly colored, come in by the day. The white help are accommodated in the nurses' home, without difficulty.

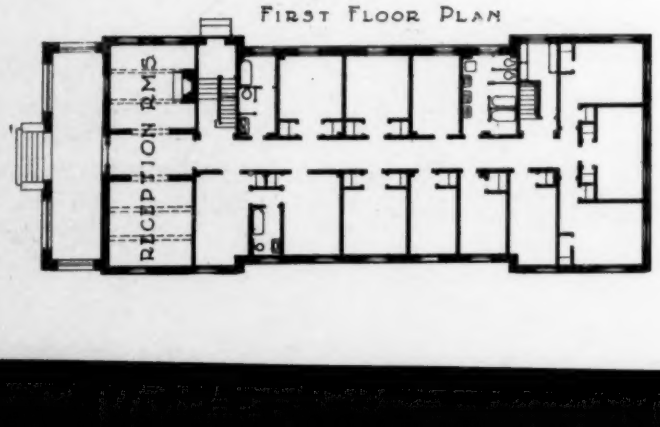
This building brings the institution to the present. It now consists of six buildings and has accommodations for ninety-eight patients and forty nurses.

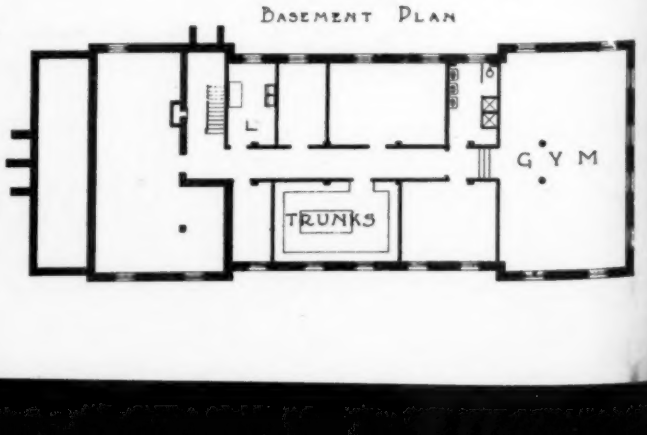
The future growth of the hospital will proceed along the lines laid down on the block plan, and as the need and fund demand. A separate home for the employees located at "K" on the plan will serve to give them the same good housing the nurses now enjoy. A maternity pavilion at "G" and a contagious ward at "H" will at some future time balance on the north the two ward buildings now built. The convalescent home shown at "I" may be as far in the future as it is from the main group on the plan, but the need for separate quarters for orthopedic work or some other clinical service may bring it into being sooner than now seems possible. The lot and the foresight of the founder have made it possible to care for any amount of growth as the need may appear.

As a part of the endowment, a modern apartment house was built on the site of the old hospital and presented to the hospital by its generous patron. From the day it opened its doors, the hospital has continued its good work as the health center of Durham County. It grows steadily in popularity increasingly winning the affection and regard of the people.

The need of increased accommodation has again become apparent and the plans of a private patients' building have been drawn and are here reproduced. This building

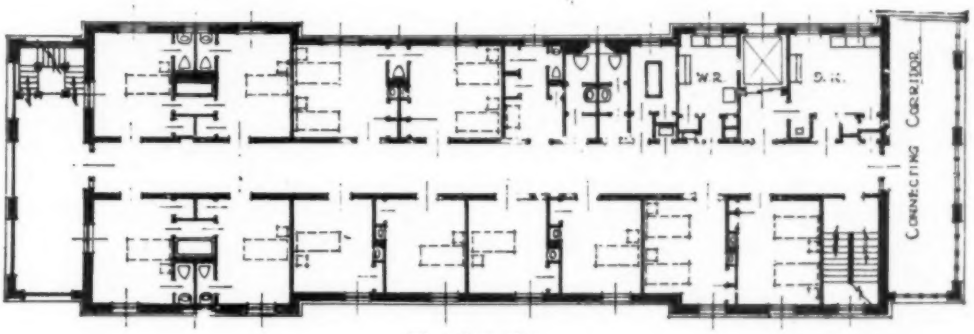






will be located on the site opposite the nurses' home marked "J" on the group plan.

The facilities for treatment are free to the poor of Durham and the surrounding country, and open to others on generous terms. Durham itself is a growing city, a type of the best in the South, busy in its factories, giving work and livelihood to thousands who turn to the hospital for surgical and medical treatment and instruction and inspiration toward better living.



First floor plan.

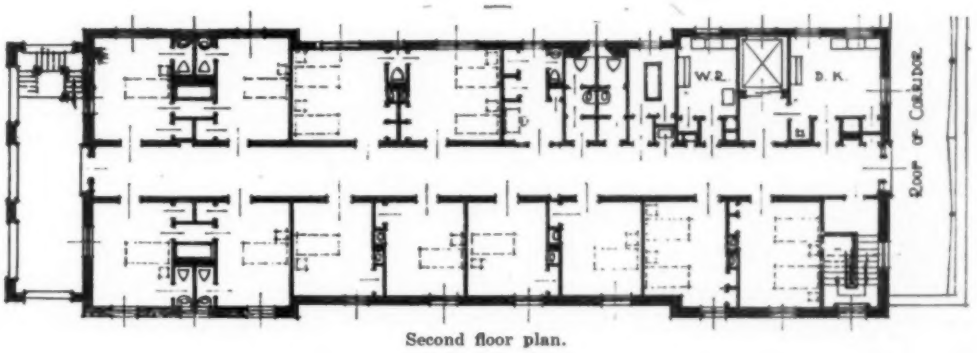
The pictures published herewith give a good idea of the type of the buildings, and surroundings except that the grounds were not completely developed when they were taken. They are now fully planted and laid out with walks and lawns which add to the attractiveness of the whole hospital plant.

Mr. Watts, the guiding spirit in all this achievement, died in March, 1921, leaving behind him the remarkable record of having himself built and equipped two separate hospitals for his native city. He unselfishly and adequately provided and maintained the medical focus of Durham for a period of more than thirty years, a record of civic interest and devotion rarely equalled. It stands as his enduring monument.

The new building is 133 feet long by thirty-nine feet wide and will accommodate thirty-two patients, all in single rooms or two-bed wards. Eight rooms have private toilets and a bath which can be used with either room in the pair. Four rooms have a toilet between which is available to either room, and all other rooms have recess lavatories.

The building is of fireproof construction, walls of brick and hollow tile, covered with Portland cement stucco on the outside and plastered directly to the hollow tile on the inside. The floors are of concrete and steel with ceilings furred down to sound proof the floors and prevent the resonance so usual in fireproof hospital buildings. The corridor partitions are double, thereby adding to the sound proof qualities of the building. An attempt has been made to isolate the noisier features of a hospital floor, such as elevator, diet kitchen, work room, etc., by using double doors between them and the corridor. With a liberal use of door checks to keep these doors closed, it is hoped the corridors and the hospital in general may approach at least the quiet of a home.

The corridor floors are of rubber tile and the patients' rooms are covered with battleship linoleum, laid with a border in the better rooms. These rooms will be furnished and trimmed with the thought of making them as homelike as possible. It is hoped that by changing some of the features we see in hospitals and which stamp them as cold and institutional, we can achieve the homelike atmosphere, at least, of a room in a good hotel. To this end we shall use casings on the windows and doors, window sills of the usual type and omit the rounded coves in plaster. The color of walls will not be hospital grey or green, but of warmer and more homelike shades. The lighting fixtures, curtains, and other appurte-



Second floor plan.

nances will be designed to accentuate the idea of a chamber instead of a ward.

Floors and Dadoes of Tile

The diet kitchens, work room, toilets and baths have floors and dadoes of tile. The dadoes vary in height, from seven feet in work room and diet kitchen to four in toilets and baths.

The door frames are of steel which will receive the maximum of hard use without showing it, and the doors are flush in some rooms and paneled in private rooms to accord with the character of the room. The plastering in corridors is of a special hard variety which cannot be scratched or scarred by beds, stretchers, or food and dressing carriages.

The heating system is steam with direct radiation, and vacuum is maintained in the returns by pumps located in the power house. All radiators are hung on the walls. There are vent ducts in each diet kitchen, work room, toilet and bath, actuated by a fan located in the roof space and properly insulated so no vibration or noise is transmitted to the structure of the building.

No plumbing fixture, except bath tubs, will rest on the floor; all are held on brackets from the walls. The hot water is controlled by automatic valves so no scalding water can reach any fixture except the slop sinks used by the maids. The building is supplied with high and low pressure system, electric light and power services and gas for emergency lighting. The roof is of red tile matching the roof in the rest of the group.

The connecting corridor is fireproof with floors of terrazzo, and flat roof of tile affording additional airing space. The first floor is the general passage of communication and the basement is used for the piping and for the passage of food and laundry to and from the main group.

Maximum Service at Minimum Cost

The whole building represents a conscious effort to afford the patient who can pay a fair price for service the best and pleasantest surroundings, consonant with hospital conditions.

No feature or detail has been considered which does not lead to this end, and in considering materials, details or fixtures one and all have been put to these test questions. Do they add to the patients' comfort? Are they really useful or only showy? Will they stand the test of time?

HOSPITAL SERVICE DIVISION ORGANIZED BY MENTAL HYGIENE COMMITTEE

Better care for the mentally ill was the aim and purpose of the founding of the National Committee for Mental Hygiene. Regardless of the fact that psychiatry has found so wide a field outside hospital walls, this organization has been continuously interested in the problems of hospital construction, equipment, and administration. The committee has recently organized a division on hospital service in order to make it possible that some member of its staff can at all times be available for problems that have to do with institutional care and treatment of mental diseases.

It has been observed that in the United States one can find all grades of hospital care from the best to the poorest. The National Committee will continue to aid to the extent of its resources those who are trying to raise standards wherever inadequate support or lack of interest has permitted low standards to prevail. The director of the division, Dr. Samuel W. Hamilton, will be able on invitation to spend sufficient time in a hospital to study its problems, assist in their solution, and secure from other sources advice on such matters as the committee is not sufficiently informed upon.

The resources of the committee will continue to be at the command of the United States Veterans' Bureau in the care and treatment of mentally disabled ex-service men.

NATION-WIDE HEALTH EXAMINATION CAMPAIGN

With the slogan "Have a health examination on your birthday" there will be launched on July 4th, 1923, the nation's birthday, a country-wide campaign for health examinations. This campaign will be sponsored by the National Health Council, the members of which include the direct members: American Child Health Association, American Public Health Association, American Red Cross, American Social Hygiene Association, American Society for the Control of Cancer, Conference of State and Provincial Health Authorities of North America, Council on Health and Public Instruction of the American Medical Association, National Committee for Mental Hygiene, National Organization for Public Health Nursing, National Tuberculosis Association; associate members: American Association of Industrial Physicians and Surgeons, National Committee for the Prevention of Blindness, Women's Foundation for Health; and conference member United States Public Health Service.

This national health examination campaign will extend from July 4th, 1923 until July 4th, 1924, and during this year an effort will be made to induce at least ten million persons to have health examinations. In order to carry out these plans throughout the country, state and local committees will be organized. Attractive publicity material such as pamphlets, posters, and a moving picture will be prepared for these local committees.

The public will be urged to go to reputable physicians or agencies for examinations. Forms for the use of the doctors have been prepared by a committee of the American Medical Association, and special forms for children have been developed by the American Child Health Association and forms for women have been prepared by the Women's Foundation for Health. The campaign will be financed from the national standpoint by contributions of money and services from members of the National Health Council and from outside sources, while in the states local committees will undertake to raise such funds as may be necessary.

Since it is generally acknowledged by sanitarians that one of the greatest needs in modern preventive medicine is a periodic complete and adequate human inventory, this health examination campaign should prove of the utmost benefit to the hygienic welfare of the country.

EAST AND WEST MEET IN PEKING UNION MEDICAL COLLEGE HOSPITAL

By RALPH B. SEEM, M.D., Former Medical Superintendent, Peking Union Medical College Hospital, Peking.

IN ANY description of the Peking Union Medical College Hospital one cannot consider it separate from the college of which it is an integral part. The college buildings are located on San Tiao Hutung between Hatamen and Wang Fu Ching streets on the property known as the Yu Wang Fu, which contains approximately ten acres. There are fourteen buildings which are so arranged that they naturally fall into two groups; those for hospital purposes, and the medical school group which includes buildings for anatomy, physiology, chemistry, and the social building.

The arrangement of the buildings about courts and the style of the external architecture are Chinese, with sloping green tile roofs and painted eaves after the manner of palaces of Chinese princes, but with modifications necessary to adapt them to the purposes for which they are to be used. The internal construction is quite Western and includes equipment required for instruction in all the major medical sciences, the clinical branches and facilities for the care of patients. The buildings are constructed of a native gray granite trimmings.

Lobby of administration building of the hospital showing information desk.

In an adjacent property is the industrial area in which are the coal gas plant, which supplies gas for laboratory purposes, illuminating and cooking; the nitrous oxide and oxyen plant; a heavy duty machine shop; a carpenter and woodwork shop; paint shop; oil and storage room; garage; precision machine shop and complete electroplating shop.

In the following description, reference will be made especially to those features of the hospital which have a bearing on its use as a teaching institution, as well as the conveniences for treatment of patients and those facilities which make for hospital economy and efficiency.

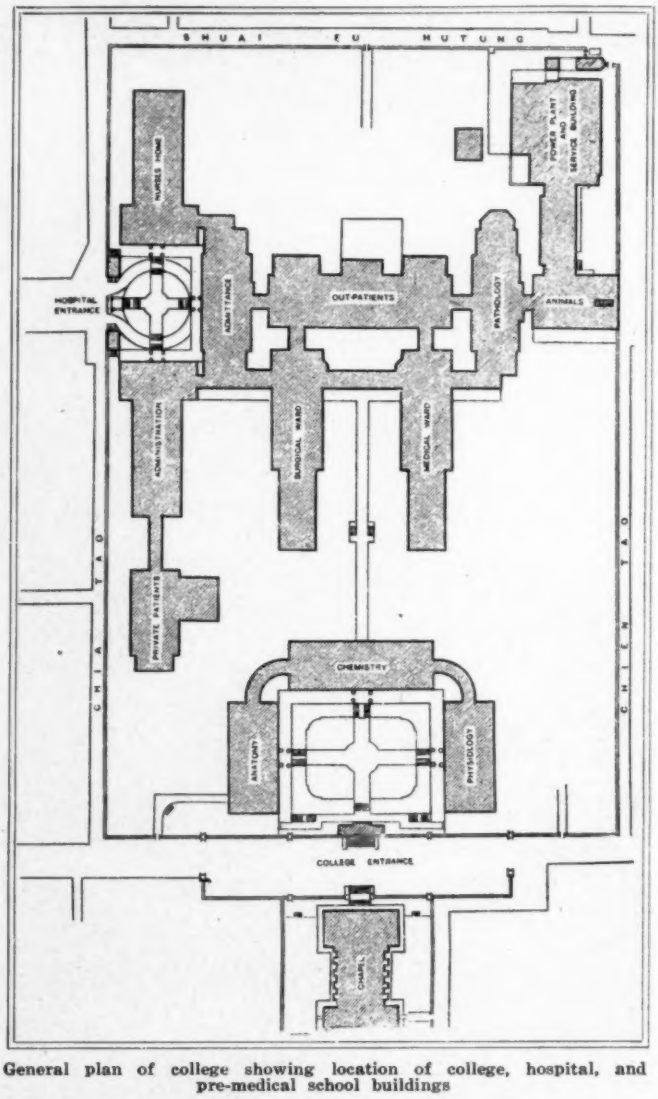
The buildings in the hospital group are the administration building; the pavilion for private patients; two ward buildings; the admittance building, which contains the admission and observation ward, the pharmacy and portions of the out-patient in the basement and first floors and wards for women and children in the upper two floors; the out-patient building in which are the Chinese kitchen, the diet kitchen, dining rooms for Chinese staff and help, the major portion of the clinics of the out-patient department clinical and experimental laboratories and operating rooms; the nurses' home; the pathological building; the animal building, in which are quarters for animals, the disinfecting room, the receiving department, and the garbage and refuse room; and the power and service building which contains the power plant, laundry, and living quarters for the male help.

The hospital court is approached by a flight of steps leading to a stone terrace which is circumscribed by a depressed driveway for the ambulance. The driveway is bridged over by stairways, which lead to the marble terrace that is on the same level as the entrance to the buildings. On the left side of the court is the nurses' home; to the right is the administration building; and between them, facing the entrance, is the admittance building. The entrance to the nurses' home, to the administration building and to the admittance building for dispensary patients and visitors to the ward patients is through the hospital court. The ambulance entrance is in the basement of the admission building.

Terraces Provide for Open Air Treatment

Entering the administration building and passing directly across the lobby and through the corridor of the administration building, one comes to the private patients' pavilion, or by turning to the left on entering the lobby one goes into the main hospital corridor running west to east. It extends from the administration building through the two ward buildings to terminate by a lateral corridor

leading to the pathological building, and may be continued toward the east when it becomes necessary to erect an additional ward building. It is directly connected with the admittance building and is joined to the out-patient building where it passes through the two ward buildings by intersecting corridors, in each of which is a passenger elevator. The corridor is free on both sides except where it passes through the buildings which it serves to connect. To the south side of the corridor on the main level between the buildings are terraces which provide ample accommodations for the open air treatment of ward patients. The basement level is used as a general corridor for the distribution of supplies and for domestic traffic. The rooms under the terrace mentioned above are used for the printing department, an orderlies' rest room, a cloak room for employees and a room for the sterilization and storage of patients' clothes. The roof of the corridor becomes the floor of an open bridge or terrace on the second floor, which connects the buildings on this level and also affords space in the open for patients. Parts of this are roofed over to form porches and the roof between the two ward buildings becomes a passage between the wards on the third floor level. An open terrace joins the hospital corridor between the two ward buildings and connects it with the buildings of the medical school group that house the preclinical branches. These buildings surround three sides of a court, the open side of which is toward the street. Across the street is the auditorium or social hall. The admittance building is connected through the basement and first floor with the nurses' home and the main corridor of the hospital. Back of the admittance building is the out-patient building. It is a long building extending parallel to the main corridor of the hospital from the admittance building to the pathological building. From its position, it might well be regarded as a head house of the two large ward buildings, with which it is directly connected on each floor. Its location permits the greatest possible freedom of communication between the activities in this building and the pathological building, with the clinical work of the wards and the out-patient department.



General plan of college showing location of college, hospital, and pre-medical school buildings

Passing out of the pathological building on the main level, one comes on a terrace which is the roof of the animal building, joining the other buildings of the hospital group to the power and service building which is somewhat separated from them. In the space between the power and service building and the animal building, is the service yard. The entrance for servants is by the gates leading into the service yard. Having described the relations of the buildings to each other, we may now in somewhat greater detail consider the distinguishing features of the several buildings.

Passing through the vestibule of the administration building, one enters the lobby. Surrounding it are reception rooms for Chinese and foreigners, the admitting office, patients' accounting office and office where appointments are made for examinations and consultations of private patients and where their histories are filled; also a room for the telephone exchange. The appearance of the lobby is quite impressive with its floor of white marble, walls paneled in red lacquer and gold, beamed ceiling with illuminated panels, from which depend gilded brass lanterns. The furniture is made of teak wood in Chinese design. Opposite the entrance is the information desk, which is so placed that the clerk in charge has a view of the entire length of the hospital corridor. Back of the information desk is a large screen which is

Medical school court.

placed in front of the entrance to the corridor that leads past the offices for the medical superintendent, department of student and staff health, superintendent of nurses, central stenographic bureau and comptroller, to the private ward building.

In the basement floor are business and accounting offices for the entire institution, the employment bureau and postoffice on one side of the corridor and on the other is the hydrotherapy department. This department is equipped with the standard type of hydrotherapeutic apparatus. In addition to the usual treatment rooms are separate dressing rooms for men and women and a large gymnasium in which some Zander machines are installed. The living quarters for the members of the house staff are on the second floor. They consist of twenty-three bedrooms, two large toilet and bath rooms with shower baths and tubs, a large sitting room, closet for linen and supplies and a hopper and broom closet.

Approach to hospital court.

The long axis of the two ward buildings is north and south, so they are exposed on all sides and receive a maximum of sunlight. The arrangement of rooms in the ward units on each floor in the two ward buildings, which are three stories and a basement high, is practically the same except one unit, which has an additional kitchen for the preparation of food for patients on whom intensive studies in metabolism are to be made. Each ward unit has a capacity of 25 beds, 16 of which are in the open ward. In the expanded portion of the unit is a five-bed ward, two single rooms and one room for two beds, a large linen and supply closet with blanket warmer, dining room, kitchen, broom and hopper closet, toilet and bathroom and utility room. The kitchen is furnished with a dish and supply closet, brine-cooled refrigerator, sink and combination steam table and warming closet with a gas stove, dish sterilizer and hot water urn attached.

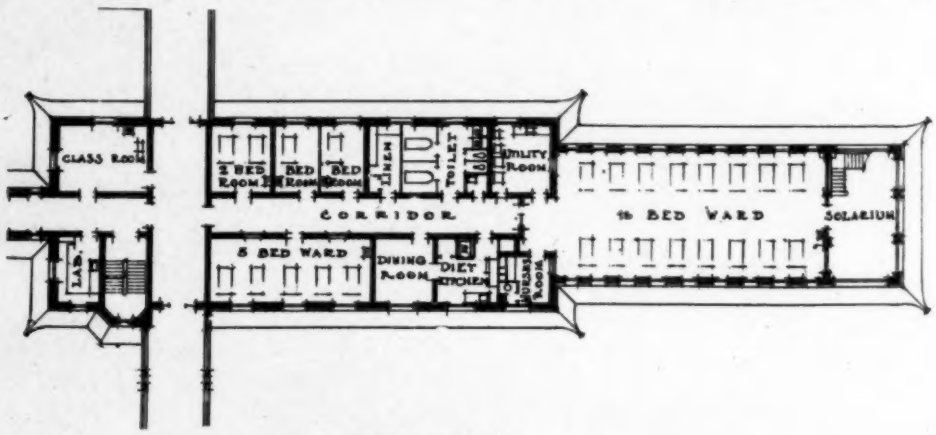
Access to the utility room is by two doors, one of which opens into a vestibule leading to the large ward and the other into the ward corridor. The equipment in the utility room, which is arranged along the wall in the following order; clinic sink, bed pan sterilizer, utensil sterilizer and instrument sterilizer, above which is placed a shelf, also includes a utility sink, solution and utensil rack and a work table. Entrance to the open ward from the ward corridor is through a vestibule in which the nurse's desk is so placed that she has before her the ward, and by turning a view of the ward corridor; to her left is the charting office and on her right is the entrance to the utility room behind her is the medicine closet. In the charting office is a desk for the ward doctor, a charting desk and a closet for ward supplies. Entrance to the nurses' toilet is through the charting office.

Extending across the entire width of the southern end of the ward is a large solarium. For each bed there is a double hung sash window with a transom above. Between each group of two beds is an electric outlet. In addition to the usual ceiling lights there is a counter-sunk lighting fixture in the middle of the floor for subdued illumination. The open ward is equipped with paddle ceiling fans and the small wards with oscillating

Two ward buildings showing terrace which joins the buildings of the hospital group with those of the medical school. The pathology building is on the extreme right.

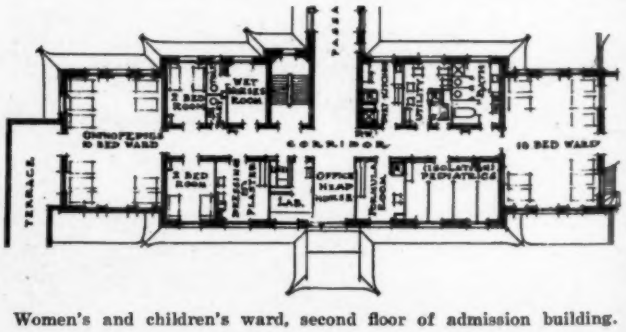
fans. Across the main hospital corridor, which traverses the northern end of these units is a clinical laboratory, a good sized room for teaching purposes, and the stairway which connects the different ward floors. The teaching room is used for the exhibition of patients and the demonstration of special forms of treatment to groups of students and for treatments and dressings on patients which it may not be desirable to do in the ward. This room is equipped with a sink and an instrument sterilizer, and is furnished with a blackboard, instructor's table, x-ray exhibition cabinet and students' chairs. The laboratory is furnished with the usual equipment necessary for routine laboratory examinations on ward patients by the interns and students; for each of whom a locker is supplied. In the basement of one of these ward buildings is the central linen room and the surgical supply room, and in the other is stored laboratory glassware, stationery, crockery and similar supplies.

The pavilion for private patients has twenty-nine rooms, approximately twelve by fifteen feet in size on three floors. There is a clinical laboratory on the second floor. On each floor across the entire width of the southern end of the building is a large sun parlor. The roof of the corridor connecting this building with the administration building provides a terrace for the use of private patients. On each floor are four bathrooms, a serving kitchen, a utility room, broom and pail closed with hopper, a large closet for linen and supplies, a charting room and blanket warmer. The equipment of these rooms is similar to that in the large ward units, which have already been described. Of the four bathrooms, one is a private bath, three communicate through a vestibule with a room on each side and to one of them there is also an entrance from the corridor into the vestibule. In the basement is a kitchen for the preparation of food for foreign patients and members of the resident staff, the staff dining room, serving room and store rooms.



Typical ward unit.

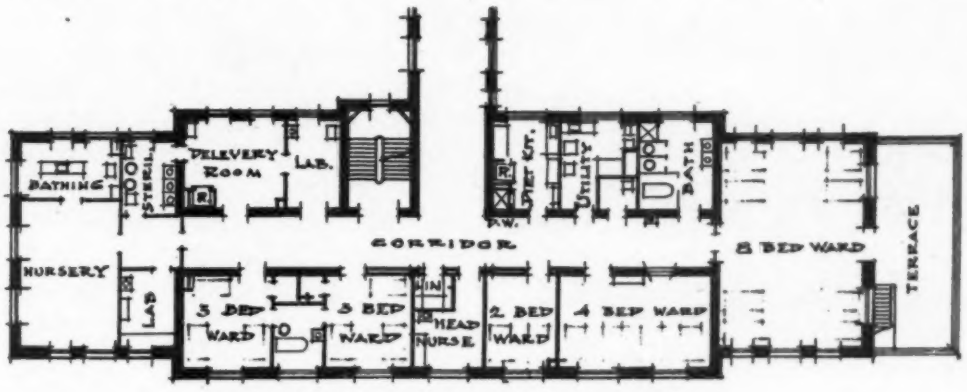
A silent call signal system for nurses is installed in the private rooms and at all patients' beds in the wards units except those in the large open



Women's and children's ward, second floor of admission building.

wards. In all the wards and at suitable points throughout the buildings are located indicators with illuminated numbers for paging members of the staff, also stations of a synchronous electric time clock system. On each floor of the private ward building is a station connected with the electro-cardiographic laboratory, so that by means of a flexible wire observations may be taken by patients in any of the rooms. Stations are also installed in each of the large ward units, in the isolation ward, in two of the operating rooms, in the consultation office in the administration building, in the medical out-patient and in the pharmacological laboratory. All parts of the institution are connected with an interior telephone system through a switchboard, which is connected with the city telephone exchange by ten trunk lines. A code ringing electric fire alarm system has stations on each floor of all the buildings, with signal bells in the administration building and the engine rooms. Drinking fountains, which supply refrigerated distilled water, are installed in the ward kitchens, serving rooms and the corridors of all the buildings.

The admittance building is three stories and a basement high. On the basement floor, which is well above the ground level, is the ambulance entrance, which opens into the corridor of the admission and observation unit. It consists of two wards of four beds each, five single rooms and the usual service rooms, including a toilet and bath-

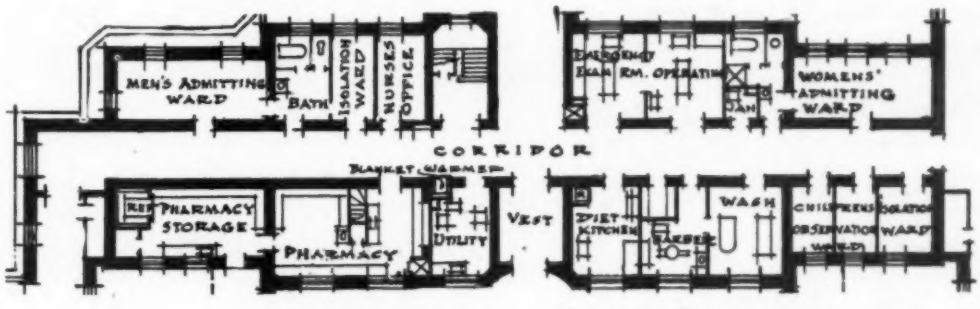


Obstetrical ward, third floor of admission building.

room for men and for women. There is also an emergency operating room with a preparation room and an admission bathroom equipped with a bath slab as well as a bath tub. Next to the admission bathroom is a barber shop, where the heads of patients may be given the necessary attention. Patients' clothes are sterilized and stored in an adjacent building. All third-class patients are admitted into the hospital through this department and all emergency cases are received here. Patients in whom the diagnosis may be suspicious of a contagious disease are detained here for a period of observation, as are also cases which are required to remain for a limited time in order to observe their responses to special treatment, or following minor surgical procedures.

On this floor is the compounding room of the pharmacy, which is connected with the dispensing room on the floor above by a dumb waiter and an interior stairway. In the spaces beneath the terraces of an adjoining building are large storage rooms for pharmaceutical supplies, chemicals and drugs. On the main floor, besides the dispensing room of the pharmacy are the admitting department of the out-patient, separate record rooms for filing histories of out-patients and in-patients, an office for social service and departments for the pediatric clinic and for the women's clinic with their respective waiting rooms and toilet rooms.

On the second floor are accommodations for women and children. These consist of a ward of



Admission ward, ground floor of admission building.

eight beds at either end of the building, two two-bed rooms, and one one-bed room with lavatory attached, a ward with four cubicals for children, a surgical dressing room, a milk room and the usual service rooms. On the third floor is the obstetrical department. There are two wards, one with ten and the other with four beds, a double room for

Private ward pavilion.

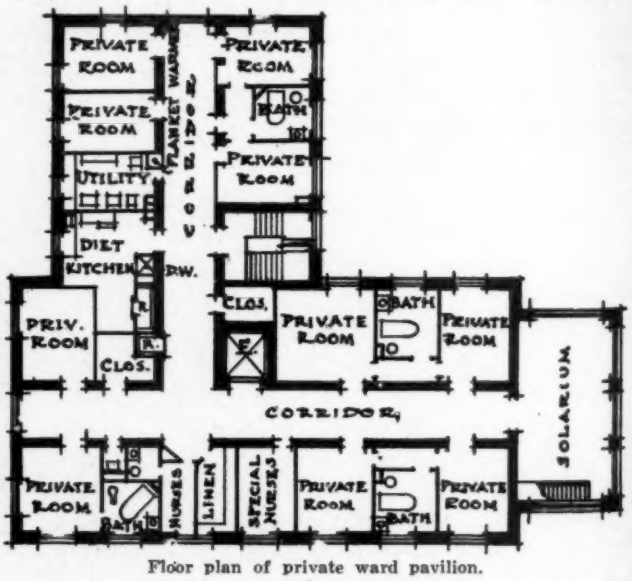
cases which require isolation, two single rooms for private patients with a bathroom between them, the nursery, a bathing room for infants, the usual service rooms, a delivery room, the operating room and a scrub-up and sterilizing room.

Out-patient Building Has Five Floors

The out-patient building is four stories and a basement high. In the basement are the departments of oto-laryngology and ophthalmology of the out-patient; the kitchen for the preparation of Chinese food; dining rooms for native staff and employees with corresponding serving rooms. The kitchen is built out beyond the outside wall of the building, so that in addition to having light and ventilation on three sides there is a monitor type of roof over the central portion of the kitchen under which are placed the gas stoves, steamers and cookers. Adjoining the kitchen are brine-cooled refrigerators of sufficient size to care for supplies in storage as well as for current use. The equipment for the kitchen is of the most modern type modified when necessary for the preparation of Chinese foods. Separated from the main kitchen by a partition eight feet high is a room for cleaning and preparing vegetables.

The diet kitchen for the preparation of special diets, both Chinese and foreign, is partially separated from the main kitchen, and is equipped with a gas stove, steam cooker, steam table, brine-cooled refrigerator and sink. In this department is an emulsifier for making milk from milk powder. On the main floor are the surgical and medical clinics of the out-patient with a separate group of rooms for neurological patients and genito-urinary patients, a supply room and office for the head nurse and separate toilet accommodations for the sexes. The corridor is very wide so that there is ample room for benches six feet long where patients may wait opposite the departments in which they are to receive treatment. The series of rooms comprising each department of the out-patient communicate directly, or by an interior corridor in the department. Each department has been especially designed and equipped with facilities for the examination and treatment of those special classes of diseases it receives for treatment.

The surgical department is divided into two parts, one for men and one for women, by a lateral extension of the corridor in which are the clinic manager's desk and benches for women and children. On the women's side is a dressing room, two examining rooms and a good sized room for plaster work. The men's side consists of a large dressing room, examining rooms, operating room, laboratory, toilet and smaller dressing rooms for special types of cases. Across the corridor is a room for the dentist and a suite of rooms for genito-urinary work, the latter consisting of an office for the surgeon in charge, examining room, treatment room and cystoscopic room. The arrangement of the rooms for the medical and neu-

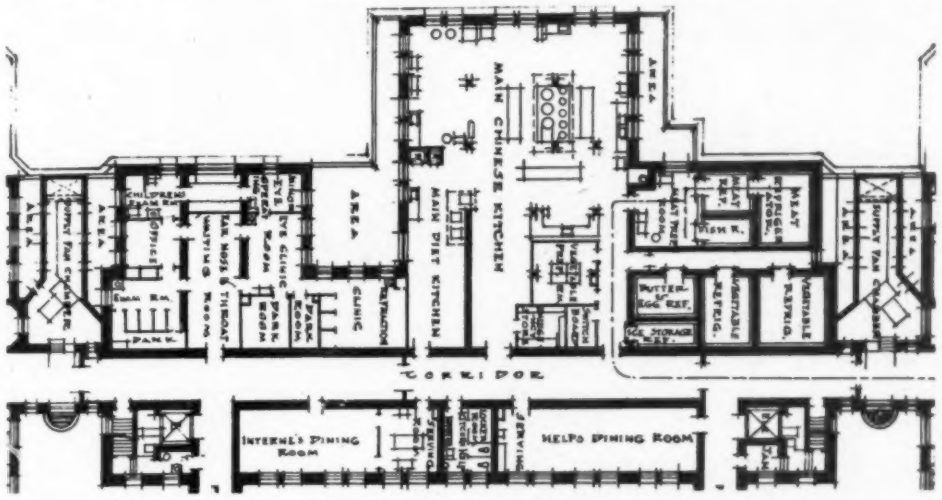


Floor plan of private ward pavilion.

rological services is very similar with modifications necessary for the type of work conducted in these departments. On the second and third floors are offices for members of the clinical staff, which are adjacent to their respective laboratories. The space given over to laboratories is quite extensive and provides ample laboratory facilities for the clinical services.

On the second floor is the x-ray department, a class room with seating capacity of 100, on either side of which are rooms where patients to be

shown at clinics may wait, and two smaller classrooms. In the portion given over to clinical bacteriology is a large room for teaching clinical microscopy to students. The animal laboratory is



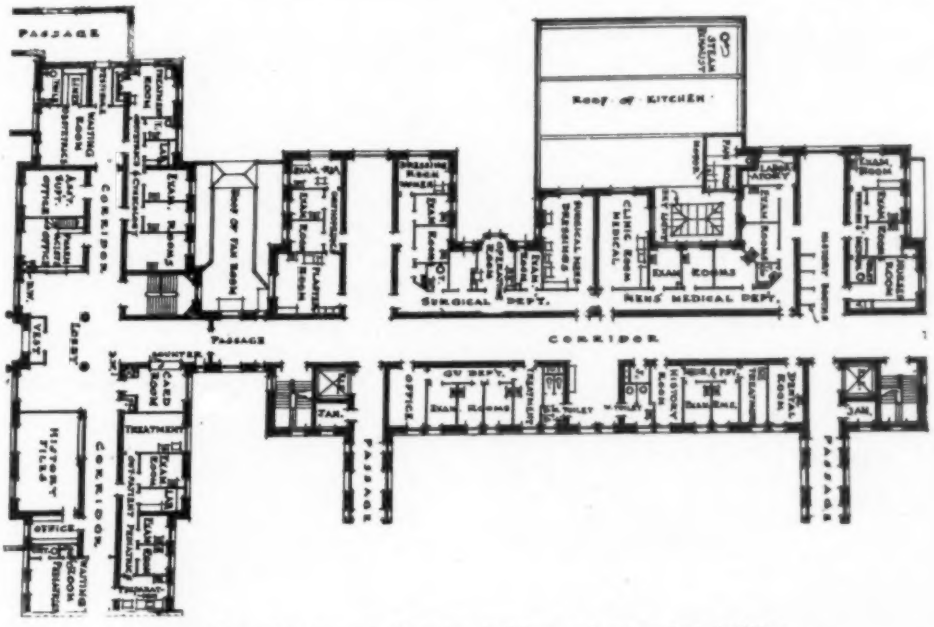
Ground floor, out-patient building.

completely equipped to give a course in operative surgery. Besides these there are laboratories for electro-cardiography, chemical bacteriology, Kjelldahl determinations, Wassermann laboratory and other types of work which are intimately connected with the clinical work in the hospital and the out-patient. The fourth floor is occupied by the operating rooms, of which there are four and also a large room for dentistry.

The operating rooms with instrument sterilizing rooms and the doctors' scrub-up rooms and the etherizing rooms are on the north side of the building, while the dressing room for doctors and nurses, instrument room, dressing and water sterilizing room, offices for the chief surgeon and for the operating room nurse and dressing rooms for patients are on the south of the corridor. The operating rooms are arranged in groups of two, with instrument sterilizing room and etherizing room between the two groups, and also at the end of the between the two groups, and also at the end of the series. The operating rooms have light from the north and overhead. The floor and wainscoting are covered with green tiles. The operating rooms are piped with oxygen, nitrous oxide, illuminating gas, compressed air, also apparatus for producing suction.

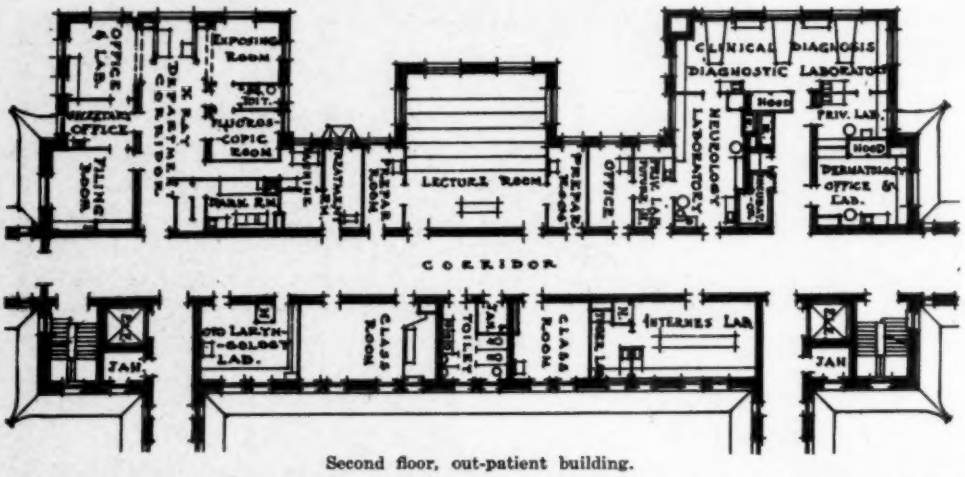
Laura Spelman Home for Nurses

The Laura Spelman home for nurses faces the hospital court and communicates with the hospital through the admittance building on the basement and first floor levels. In the basement, which is well above the ground level, are a large dining



Floor plan, first floor of admission building and out-patient building.

room with serving room, kitchen, science laboratory, class room, good sized store room and small hand laundry for the personal use of the nurses. On the first floor is a large reception hall, two large sitting rooms, and several smaller ones. The remainder of this floor and the second floor is given over to living and sleeping accommodations for nurses. There are four single bedrooms, twenty-four rooms large enough for two nurses, ample toilet and lavatory accommodations and four suites with baths for members of the upper nursing staff, and a guest room with bathroom attached.



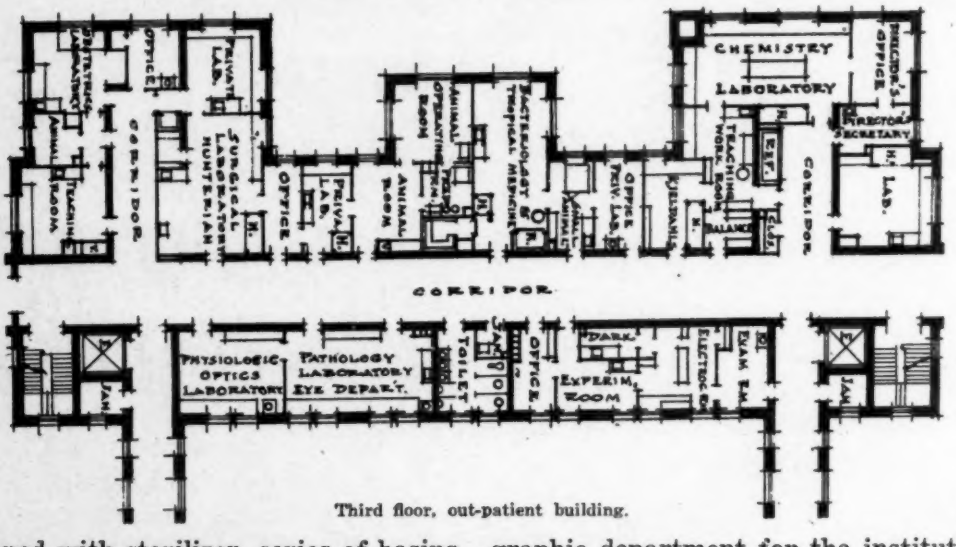
Second floor, out-patient building.

Adequate Mortuary Provided

In one end of the basement of the pathological building is the mortuary. It consists of a preparation room for the morgue attendant, a cold room that has a capacity for eight wheeled stretchers on which the bodies rest, and additional compartments for post-mortem specimens; a utility room, which is equipped with sterilizer, series of basins for scrubbing up and lockers for students and staff members; and the autopsy room, which projects beyond the building so that there is a direct light above the autopsy table as well as from the sides of the room. In the floor are a number of outlets for running water and drains with which tables may be connected to be used by groups of students for practical work with the autopsy material. In one wall of this room is a projection screen of ground glass. The projection apparatus is behind the screen in a room between the autopsy room and the class room where it is available for demonstration in either room.

Useful as Class Room or Chapel

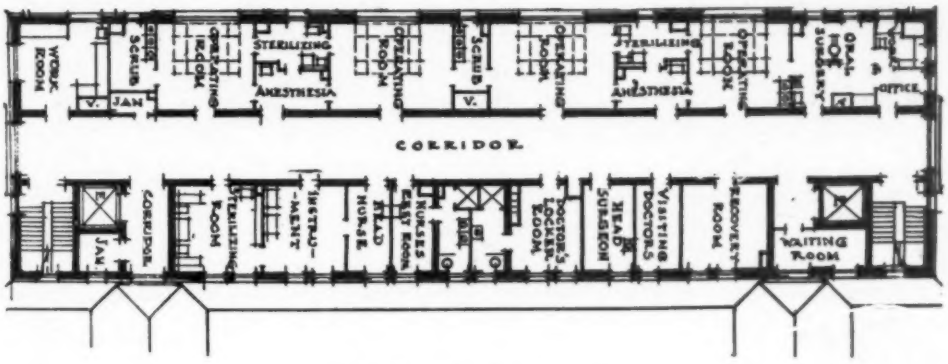
A fair sized class room is included in the group, which may be used as a chapel when desirable. In the southern end of the third floor of the pathological building is the isolation ward. It has eight single rooms for patients, two have a private bath between them and may be used for private patients. This ward does not communicate with the pathological building and is entered from the corridor of the out-patient building. The photographic department for the institution is also on the third floor. The remainder of this building is occupied by offices for the staff, museum, laboratories, and teaching rooms required for instruc-



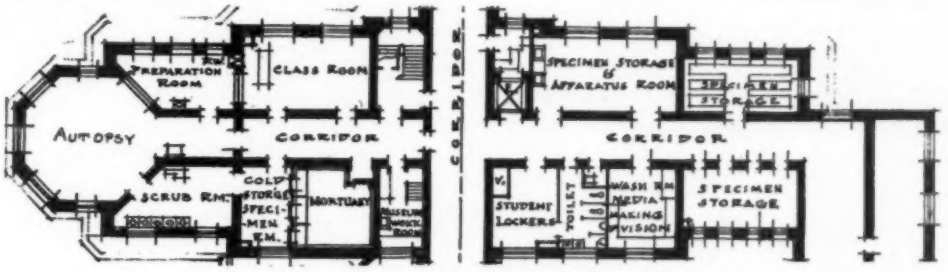
Third floor, out-patient building.

tion in bacteriology, pathology, and public health.

In the building known as the animal building, besides the quarters for the animals, are contained the disinfecting rooms, the receiving department and the garbage and refuse room. The animal quarters are connected with the pathological building through the basement. In it are kept the animals required for current clinical and experimental purposes. It consists of rooms for the segregation of small animals in cages, rooms for larger animals, which communicate with runways or yards, and rooms for the storage and preparation of food and for cleaning and sterilizing the cages. The mattress disinfector is built into the wall between two rooms in order to avoid contamination of articles which have been passed through the sterilizer with those which have not. The receiving department consists of an unpacking and checking room, offices for the purchasing agent and clerical staff. All supplies furnished the institution pass through the receiving department. The garbage and refuse room is built over the incinerators, which have openings into them through the floor of the garbage room. After the garbage has been inspected it may be emptied directly into the incinerators. In the garbage room are sinks for cleaning the garbage cans.



Fourth floor, out-patient building.



Ground floor, pathology building.

Laundry Occupies Whole Second Floor

In the space corresponding to the first floor and basement of the power and service building are the boiler room, coal bunkers and the power machines. The laundry occupies the whole of the second floor of this building and receives light and ventilation from all sides. It is equipped with machinery of a standard pattern, which is adequate to meet the needs of the entire institution. On the third and fourth floors are sleeping rooms with ample toilet and bathing facilities for the male help. Adjoining the power and service building is a refinite plant for softening the water.

AMERICAN MEDICAL AID FOR RUSSIA ASKS PROFESSION TO HELP

Members of the American Medical Aid for Russia, the medical division of the American Friends' Service Committee, (Quakers), are making an effort to collect money, clothing, instruments, books and journals for their medical colleagues in Russia. Many of the profession in Russia lack the barest necessities of food and clothing, and are in need of drugs, medical and surgical instruments, scientific books and journals.

The promise is being made to American physicians who are willing to assist their Russian colleagues that their contributions will be promptly and efficiently distributed in Russia. It is announced that literature will be distributed in cooperation with the Russian Health Department through notices printed in the official bulletin which will announce that medical literature in English is available and can be had upon request. The relief workers will distribute the material to the Russian hospitals, medical schools, and individuals physicians directly.

DR. McGRATH RESIGNS

Notice has recently been received of the resignation of Dr. B. F. McGrath as secretary-treasurer of the Catholic Hospital Association and as secretary of the executive committee of the editorial staff of *Hospital Progress*. The resignation became effective June 1. Dr. McGrath has held these offices since June, 1916.

CLEVELAND HOSPITAL COUNCIL'S COOPERATIVE PURCHASING SERVICE*

By HOWELL WRIGHT, Attorney-at-Law, Director of the Cleveland Hospital Council, Cleveland, Ohio.

THE purchasing service of the Cleveland Hospital Council is a manifest illustration of the advantages of cooperative and professional purchasing in comparison with the customary individual and indiscriminate buying. The results obtained in four years demonstrate that the principles of centralized purchasing, which has become such a powerful factor in the conduct of modern business corporations, can be successfully adapted to the management of a group of public charitable hospitals and similar institutions through a central office, controlled and operated by that group for the common benefit. And the best is yet to come.

Twenty-one Hospitals Pool Purchasing

Centralized purchasing was considered for a year by the Council during which time an examination was made of the work of the Hospital Bureau of Standards and Supplies of New York. When the decision was made to organize the service—and it was not made without some fear and opposition—each of the twenty-one hospitals then represented in the Council did their own individual buying of provisions, general supplies, medical and surgical supplies, and other equipment, amounting to about a million dollars a year. Not only was the Council to be of service in actual purchasing of such supplies and of bulk and standard articles, but it was expected that the central bureau, if properly organized would effect savings in the joint anticipation of wants; in the formulation of agreements and contracts and by putting hospitals in touch with the proper places to buy commodities. Great emphasis was laid upon the value of a bureau of information in the central office to be consulted at any time on all matters involving purchasing and standards. This was the program adopted in May, 1918.

An advisory committee on purchases and standards was appointed with Mr. Henry S. Pickands, the purchasing agent of Pickands, Mather Company, as chairman. The executive secretary selected Mr. Guy J. Clark, formerly of the purchasing department of the City of Cleveland, as purchasing agent. Both of these men are still serving the Council in their respective capacities. The budget for the first year's service was $6,500. Work was actually begun June 15, 1918. The staff has increased four-fold in four years. The budget for 1923 for the purchasing service was $20,000.

The Council was unusually fortunate in having an early opportunity to become a member of the Hospital Bureau of Standards and Supplies of New York, an agency which standardizes articles and supplies used by hospitals, purchases both under contracts for its members and as a jobber and also finances on behalf of its members a large volume of purchases. It supplies information and quotations in response to inquiries from its members. This membership still continues and has been of great value to the Council and its members. It is a marvel that more hospitals in this country do not take advantage of membership in this well conducted and fundamentally sound business institution.

Yearly Increase of Supplies Purchased

During the last six months of 1918, $26,000 worth of supplies were purchased for the hospitals. In 1919 the volume of business was $268,500; in 1920 it was $356,785 for hospitals alone and $386,000 for all institutions; in 1921 it was $489,000 for hospitals and $584,000 for all institutions; and in 1922 it was $663,118 for hospitals and $740,440 for all institutions. This increase has been gradual and satisfactory. The service has been operated primarily for hospitals. Some other institutions have used it occasionally while others have for the last two years taken advantage regularly of certain agreements and contracts. The present policy of the council is to increase the volume of business for hospitals and similar institutions rather than to make numerous small purchases for a large number of dissimilar institutions. Advice and information of the Council is available at any time to any member of the welfare federation. Examination of the commodity books which contain a record of all purchases made since the establishment of the service, shows that almost every conceivable commodity used by hospitals has been purchased in small units or in quantity. A properly organized purchasing bureau can actually purchase or arrange for the purchase of practically every commodity used by a public charitable hospital or similar institution. The hospitals are urged to anticipate their wants and to issue requisitions to the Council for the

*This concludes the series of three articles on the Cleveland Hospital Council's activities. The preceding articles appeared in the May and June issues.

purchase of needed supplies. Each institution is designated by a key number which appears on serially numbered requisition books supplied to each institution. For example: 18-A-223 means requisition No. 223 from ..... Hospital, and is used also as an order number for the supplies purchased on that requisition.

Many requests for the purchase of supplies are also received by telephone and by personal call at the hospitals. The use of requisitions has increased. In a single year, 1922—3,871 requisitions were received by the Council. From these and other orders received from the institutions, 20,806 purchase orders were written up. The requisition is an item of consequence in centralized purchasing. Complete understanding and scientific use of it is a matter of long education. Purchase orders are written in triplicate. One copy is kept in the office, one is for the vendor, and the third is sent to the institution for which the goods are purchased. This procedure guarantees a complete record for all parties to the transaction.

Purchases made by the Council are, by direction, billed straight to the hospital or other institution or to the Hospital Council. In the case of the former, payment is made direct by the hospitals to the vendor. In the case of the latter, payment is made by the council from a special fund and the institution reimburses the council. All goods bought by the Council for its members through the New York Bureau are billed direct to the Council. After a short experience, it was found that some of the hospitals did not take advantage of cash discounts to which they were entitled on certain purchases and that, from year to year, a good deal of money was thus needlessly lost. In addition, it effected both the buying power of the individual institution and that of the Council.

Special Purchasing Fund Created

Since it is not good business to allow bills to stand sixty, ninety or 120 days before payment is made, and since failure to take cash discounts results in an unfair burden being placed upon charitable funds in the community, the Council decided to create a special purchasing fund which was made possible through the welfare federation in 1919. The fund established is not large but is rapidly turned over and in a single year has been utilized to pay bills for purchases amounting to $165,000. The office system has been so arranged that an exact account is kept of all purchases. When the hospital fails to take advantage of the cash discount within the prescribed period, the Council pays the bill and take the discounts. The earnings of the fund have been considerable.

One common impression and also an argument often used by opponents of centralized cooperative buying is that the central agency sacrifices "quality" for "cheap" prices in order to show a saving. No such impression or argument could be more erroneous, if the central agency is properly organized and gives due consideration to joint anticipation of wants, makes proper use of standard specifications, purchases under competitive bidding and makes agreements or contracts. In all of its purchases, the Council insists upon quality and service, as well as price.

Use has been made of standard specifications. The Council now has fifty agreements or contracts in force, many of which are available because of membership in the New York Bureau. Others have been made by the Council itself. Among the important items which have been standardized and are now bought by the Council upon specification are canned fruits and vegetables and meats. These specifications, as well as a very excellent standard set of specifications on hospital wheeled furniture, have been published and made known to the hospital field. It is interesting to note that in the preparation of specifications on canned fruits and vegetables, which were prepared in cooperation with the hospital superintendents and dietitians, the Council had the assistance of the National Canners Association and the Canners League of California. Use was made also of certain data supplied by the United States Department of Agriculture.

Specifications and Contracts

The purchase of meats on specifications was declared to be impossible when first proposed by the Council. However, in cooperation with the hospital superintendents and dietitians and with the aid of other people experienced in the meat business, such specifications have been worked out. As a result, the Council is now buying practically all the meat used by sixteen hospitals and thirteen other similar institutions. There is no question as to results obtained and obtainable both as to quality and price through cooperative purchasing upon standard specifications.

The Council has made only a beginning but is further directing its energies to this end. As regards specifications, Mr. John C. Dinsmore, purchasing agent of Chicago University, stated the matter precisely when he said, "Right specifications are the very foundation of the successful conduct of a purchasing department." Among the agreements and contracts made by the Council are included gauze, cotton, electric light bulbs, electric fans, typewriter ribbons, carbon paper, soap and repairing of surgical instruments.

As a bureau of information, the Council has supplied a bulletin service to its members, advising them of new agreements or contracts made, of changes in price and giving general information on market conditions. In 1922, forty-nine bulletins were sent to the hospitals, some of which asked for information which would be of value in the making of contracts or agreements. The value of these bulletins, if properly used, may be seen from the following examples:

No. 1. "The Council has just made very favorable contracts on ..... The prices on the items contained in these contracts will be $..... until ..... 192.... We recommend that you take advantage of this arrangement and schedule your shipments as needed up to the expiration of the contract."

No. 2. "It is our opinion that the hospitals should not stock up on ..... at the present time. While there have been regular advances for a short period of time on this article, it is impossible to make a prediction for the future. We recommend, therefore, that the hospitals buy their requirements of ....., for the time being just as needed."

No. 3. "We have just received prices on..... for delivery in the fall of 192.... The article most generally used by the hospital (here a description) shows an advance of $..... per unit over the price the previous year. We recommend that you place your orders with us at this time for fall delivery of this article."

This bulletin service is considered almost as essential as the making of actual purchases for the hospitals.

Western Reserve Pharmacy School Aids

Three years ago, Mr. Edward Spease, dean of the School of Pharmacy of Western Reserve University, made the following recommendations to the Hospital Council:

1. The school should furnish a properly trained man or woman for the pharmacy in each hospital where one is not now employed.
2. Training should be given to students in these pharmacies while the students are in college.
3. The school should aid in the buying of drugs, chemicals and glassware.
4. The school should manufacture everything possible for the hospitals that will benefit them and aid in our teaching program.

These recommendations were thus elaborated upon in the following manner. "The school could well aid in the selection of firms from which bids should be received. A firm, like an individual, cannot serve both God and Mammon. Drugs should be bought from firms having a conscience. The Pure Food and Drug Act does not yet afford the full protection needed. If orders for drugs are grouped, such quantities may be bought in the open market from brokers or from importers without the hospital being compelled to take what the jobber offers after it has passed through many hands.—Drugs, including preparations, tablets, etc., should be tested at the school of pharmacy before being used in the hospitals. The physician should know when he uses a drug, that it has passed through competent hands and that it is just as labeled.

There is not so much trouble in the buying of chemicals as many of them are made at one place. A fixed supply, however, for a definite time, of chemicals that are permanent, should be purchased at one time.—Glassware should be standardized and purchased on specifications. Its ultimate use should always be given consideration in buying. Styles, shapes, and weights are of importance in order that the user may secure what he wishes. It is necessary to know if the glass is hard or soft, depending upon the use to which it is to be put. The buying in small quantities of a dozen flasks when the school alone buys five gross is not an economic method of purchase for the hospitals.

Many solutions, elixirs, tinctures and the like can be prepared as well as, in most instances and better in some, than they can be bought. A manufacturing laboratory should be conducted in conjunction with the school in which practically all the preparations used in the hospitals can be made. This laboratory could also make tablets, as well as any other manufacturing laboratory. All of this manufacturing program should look to the interests of the hospitals and to the teaching of the pharmacy students."

These recommendations were emphasized by the Hospital and Health Survey and generally approved by the hospitals. In the last two years, excellent progress has been made toward carrying them out. For the purposes recommended by Dean Spease, the hospitals have become affiliated with the school of pharmacy through the Hospital Council. The school has gradually been equipped with facilities for the manufacture of medicinal preparations. During the first year, one of the faculty of the school of pharmacy spent two days a week as buyer in the office of the Council. All requisitions for pharmaceutical supplies were referred to him. Preparations and other supplies which could be made at the School were ordered there.

Varied Activities of Pharmacy School

Other supplies were purchased by the same buyer direct from the supply houses. This cooperative arrangement resulted in a considerable saving of money even though the experiments were conducted on a very limited basis the first year. During this period, representatives of the school visited the hospitals and discussed phar-

macy problems with the pharmacist, physician or the nurse. They assisted in the organization and arrangement of some of the hospital pharmacies. Special formulae were prepared for the hospitals and experiments upon other formulae were conducted in order to perfect them for specific uses in certain hospitals. The School also made tests and analyses to determine the fitness for use of certain medicinal products to make comparison between new products offered and ones already in use; to establish purity and also to establish the fitness of crude raw materials for the manufacture of certain pharmaceuticals.

This cooperative service has developed more rapidly during the second year. The school has again enlarged its equipment and personnel. Manufacturing equipment has been installed. Two men who have had experience in manufacturing products in large commercial establishments, have been appointed on the faculty to supervise the manufacturing and to conduct the control laboratory. A large list of preparations can be provided for the hospitals. A drug buyer now spends four days a week in the office of the Council, which is the central purchasing office for the cooperative service. The volume of manufacturing and purchasing is increasing gradually and satisfactorily.

A beginning has been made on the educational side and it is expected that more internships will be provided at an early date in the larger hospitals for the senior students. Arrangements for the supervision of pharmacies in the smaller hospitals are under way. The experiment is on the right track. While economies are being promoted by cooperative manufacturing and purchasing, the result most to be desired is that the sick in the hospitals shall have the best that scientific pharmacy can provide.

Many people have the impression that a central purchasing agency should save money on every purchase made; often regardless of purchasing volume. Some institutional officials, with this in mind, think that the way to buy each article is to get a price direct from several firms and then telephone the central purchasing agent and ask him to get a price. A trustee recently asked the purchasing service to provide a list of articles showing prices that could be obtained by the central agency in a column compared with those obtained by his institution. Apparently joint anticipation of wants and buying of supplies in large volume was not in his mind.

A cash saving cannot be realized on every purchase by a central cooperative purchasing agency or even by the purchasing department in a business corporation which has absolute authority in all purchasing matters. "To get cheap prices for quality goods" the purchasing office must have a volume of purchases at its command which will give it the advantage over the individual institution. To illustrate:

1. Fifteen hospitals purchase individually and direct an article manufactured by a local firm. The unit price is standard. On this standard price, some hospitals get ten per cent discount; some fifteen per cent and two get twenty per cent. The central purchasing agency for these hospitals takes over the entire volume of business and secures a twenty per cent discount for the group.

2. In a certain line of crackers and other bakery goods the price is standard and varies only with the quantity. The unit price decreases as the quantity purchased is increased. If twenty hospitals each buy separately, they will each pay the price that applies to their individual consumption. Under an agreement made by the purchasing agent for the purchase of the entire quantity used by the group, each institution gets the lowest price that can be secured for the business of this volume.

Many questions have been asked about savings resulting from use of the purchasing service of the Hospital Council. It is our belief that on the basis of a year's business, the average percentage of saving in excess of the cost of operation is approximately ten per cent. This is not subject to exact proof. It is possible, however, to prove savings made on articles purchased on specifications and on agreements and contracts. Savings are thus being realized in large amounts and very definite savings are being realized as a result of the purchasing and manufacturing service conducted in cooperation with the school of pharmacy.

Certain savings which cannot be computed in dollars and cents result from the service to the hospitals in advising them of the market conditions, when to buy, what to buy and what not to buy; also in the energy and effort on the part of the individual hospital superintendent in not having to spend time gathering information about needed supplies. Time and money is also saved by the purchasing service when it is enabled to borrow needed supplies from one hospital which has a stock for another hospital which is out. There are many instances of this kind which show no savings on the books because no charge is made from one hospital to the other. Savings also result in arranging for purchases to be made direct by individual members after the arrangements are completed. For example, arranging for the purchase of coal, securing the source of milk supply and arranging for price and delivery.

Speaking on the advantages of cooperative buying with reference to "savings" at a meeting of the Council in 1918, the chairman of the purchasing committee said in part:

"Purchasing goods is a business transaction of

purchase and sale. Ordinarily two parties are involved, the buyer and the seller. The seller generally does not hesitate to have himself represented by a highly skilled salesman, well versed in his line and liberally paid in accordance with his ability to market his goods. On the other side, it is customary even in business institutions of considerable size to put up against a salesman, a buyer of far less natural ability and usually with far less total experience, and he has the further disadvantage that what experience he has is not confined to one line but is spread over the entire list of purchases.

In a good many cases, the conditions are even worse than this, as there is no one specifically charged with the duty of making the purchases. The purchases are made by various people in the institution for various departments and the purchasing work is a very small part of their duties. With this condition maintaining, it is not difficult for the shrewd salesman making full use of his skill, knowledge of market conditions and the products he is selling and his natural personality, to dispose of a large quantity of his products at prices considerably higher than he would be willing to take if he were disposing of them under conditions which necessitated his 'going the limit' or losing the order.

Definite Statistics Not Available

"The problems which are met in purchasing of supplies are so many and so varied and the conditions under which purchases are made are so rapidly changing, that it is almost impossible to prepare anything in the way of definite statistics which will show conclusively a percentage of saving where purchases are made scientifically as compared to purchases which are made at random. There are, however, certain essential elements which can be pointed out which will show in themselves enough saving to justify a well organized purchasing department in any institution of any size. This can be best illustrated by general items and isolated instances.

After enumerating certain classes of articles which are standard and sell at standard prices, the price varying only with the quantity of such articles, reference was made to the class of commodities known as "specialties." These are manufactured or produced by individual business concerns and are sold on reputation, advertising and salesmen's talk. It is not at all uncommon to have decidedly inferior articles sold on the strength of certain talking features which they possess, which really are of no value whatever in proportion to the quality of the goods. This condition is found more frequently in mechanical lines. You will find the trade papers and magazines generally filled with articles having special exclusive features, many of which are doubtless of value, but at the same time many of which are merely talking points for the salesman.

Standardized Buying Urged

"Another item largely used to secure undue prices is 'branded articles.' The plan of selling these is often accompanied by a lot of advertising, recommendations and 'reputation,' when as a matter of fact, the essential features of the articles can be duplicated in well-known bulk commodities at a fraction of the price. There is a vast array of materials and commodities purchased by institutions which do not possess any of the above characteristics. They are the more or less stock commodities that can be bought from local jobbers or retailers anywhere, and the usual problem involved is to be sure that the price asked by the jobber and retailer is not unreasonable in proportion to the quantity. On this class of buying there are no real rules to be applied. It is largely the question of sense and experience of the purchasing agent and his knowledge of the reputation of the bidders. There is a vast work that can be done by a purchasing agent in this category by eliminating from it the enormous amount of buying that is done locally and in very small quantities which could be standardized, systematized and bought on large contracts, eliminating it entirely from the retail category with all of the additional costs that the retailer puts on in return for his ability to ship it out of stock and give prompt service.

"There are other features of buying which involve probably the largest saving of any and these are large items of new equipment, new hospital construction and reconstruction. In this and in the purchasing and installation of laundry and other kinds of machinery, my experience would indicate that a competent purchasing agent could save large sums of money with better satisfaction as compared with results that would be obtained through the usual channel of architect, engineer or building superintendent."

Factors in Centralized Purchasing

In summing up, Mr. Pickands spoke as follows —and the experience of the Council during the past four years coincides with his statement: "I cannot make myself believe that the hospital business is so essentially different that the fundamental principles of purchasing which have been so successfully applied to other kinds of business cannot be equally well adapted in supplying hospital needs."

The essential factors in centralized cooperative purchasing as indicated by the experience of the Cleveland Hospital Council in four years are:

1. Pooling of interest and abilities.

Hospital and institutional superintendents are not, as a rule, trained purchasing agents. They are often good buyers in one or more specialized lines. A combination of such abilities with those of a professional purchasing agent in a central purchasing agency will give each member the benefit of the best purchasing experience of the group and produce great economies and savings.

2. Volume of business at the command of the purchasing agent.

Personality and character alone in a central purchasing service will not produce cheap prices for quality goods.

3. Acceptance of the best judgment of the purchasing agent and his associates, based upon study of all the conditions.

4. Acceptance of the recommendations of the purchasing agent as to what to buy; what not to buy; and when to buy. Whole-hearted confidence in the central agency is a prerequisite.

5. Joint anticipation of wants, adequate storeroom space, continuous inventories, minimum or maximum stocks of goods consistent with market conditions, careful scrutiny and approval by one person in authority of all requisitions issued in each institution before they are sent to the central agency.

6. The preparation and proper use of right specifications and scientific analyses and tests of samples.

7. The making of agreements and contracts.

8. A bulletin service giving advice and information on agreements, contracts, special purchases and market conditions.

9. A special purchasing fund for emergencies, discounts, etc.

10. A bureau of information, to be consulted at any time.

ETHYLENE AS AN ANESTHETIC

A significant report on "Ethylene as a Gas Anesthetic" by Dr. Arno B. Luckhardt and Mr. J. B. Carter appeared in the May 19 issue of the *Journal of the American Medical Association*. The study contains the results of experiments which show the influence of ethylene on various types of cases in 106 operations performed from March 14 to April 26, at the Presbyterian Hospital, Chicago.

The authors comment as follows: "On the basis of this clinical study, comprising a series of 106 patients with and without cardiovascular, renal and other complications, we can state briefly that ethylene-oxygen anesthesia is very satisfactory. Since it is possible to administer with the ethylene, on the average, as much as from 16 to 18 per cent oxygen, asphyxia and its consequences are avoided, and cyanosis, so commonly seen with nitrous oxid, is conspicuously absent. Analgesia comes on surprisingly early. Considering, furthermore, that the relaxation is more complete that with nitrous oxid, we find that ethylene compares most favorably with ether. In fact, the impression is gaining ground that ethylene has some of the advantages of ether, without many of its troublesome after-effects. The very prompt recovery points to a rapid elimination of the ethylene, and may necessitate the administration of morphin immediately on the conclusion of an operation.

"We append a note of warning to those who contemplate using ethylene in the clinic. Ethylene gas is inflammable. It forms, moreover, with air, (or oxygen) an explosive mixture in a concentration of four volumes of ethylene with ninety-six volumes of air. Until further work, now in progress, has been performed on its explosive properties, we warn surgeons and anesthetists not to use the gas in the presence of an electric spark, the actual cautery or a free flame.

"Satisfied that, under proper conditions of administration (soon to be published by Drs. Herb and Lyons), ethylene gas produces in most individuals not only analgesia but also a state of surgical anesthesia incomparably better than with nitrous oxid for any kind of surgical work, we offer the gas to the medical profession for further trial in the clinic.

"We feel that others who use it will be impressed with the rapidity and ease with which anesthesia is induced, with the slow and regular respiration, with the dryness and warmth of the skin, with the generally pink coloration of the skin and viscera, with the slowness and regularity of the pulse, with the absence of salivation, with the absence of blood pressure changes during or following considerable trauma and manipulation, with complete muscular relaxation, and, finally, with the remarkably rapid recovery without serious sequelae after even a prolonged anesthetization.

"In the meantime, we are continuing our investigations in the laboratory and clinic on various aspects which are of immediate importance."

LAY CORNER STONE OF MATERNITY PAVILION OF BROOKLYN HOSPITAL

An impressive ceremony marked the laying of the corner stone of the new maternity pavilion of the Methodist Episcopal Hospital, Brooklyn, N. Y. which took place June 4, 1923. Among the features of the exercises were a historical statement by the Rev. Abram S. Kavanagh, D.D., superintendent of the hospital from 1902-15; greetings by the Rev. Newton E. Davis, D.D., corresponding secretary, the board of hospitals and homes; by the Rev. John Barlow, D.D., pastor, The Memorial Presbyterian Church, Brooklyn, N. Y.; by Dr. John O. Polak, Long Island Hospital, Brooklyn; and an address by Dr. Royal S. Copeland. The silver trowel was presented to President Sloan by the Rev. James E. Holmes, D.D., superintendent of the hospital. The corner stone was laid by the Rev. Wallace MacMullen, D.D., superintendent, New York district.

APPOINTS SOCIABILITY COMMITTEE FOR A. H. A. CONVENTION

One of the features of the plans for the American Hospital Association convention to be held at Milwaukee in November is a sociability committee to be known as the "glad hand" committee which has recently been appointed by Asa S. Bacon, president of the association.

The Reverend Herman L. Fritschel, Milwaukee Hospital, has been appointed chairman of the committee which will provide means for helping the delegates to become better acquainted and have charge of social phases of the convention.

"The great thing in all education is to make our nervous system our ally instead of our enemy."—William James.

One portion of our being is always playing the successful quack to the other.—Carlyle.

WESLEY MEMORIAL HOSPITAL INSTALLS DEEP THERAPY APPARATUS

By S. J. ALDEN, M.D., X-Ray Department, Wesley Memorial Hospital, Chicago.

OBSERVATION of a considerable number of x-ray laboratories in offices and departments in hospitals impresses one that apparently less advancement has been made in the choice of rooms and the placing of equipment than in laboratories of other types and in other departments of the hospital.

Too frequently you are conducted to some "out of the way" part of the institution, possibly down dark corridors to find the laboratory occupying one large or several small rooms which are dark, dingy or somber looking having apparatus installed largely with the seeming object of getting in all of the apparatus.

The patient entering such a department already has many apprehensions, both as to his physical condition and as to what is before him, and his feeling of apprehension is apt to be increased when he sees a formidable array of apparatus crowded together in such unpleasant surroundings. It is desirable to avoid as far as possible occasioning such feelings in the patient, in order to facilitate the work that is to be done requiring his cooperation; also it is less apt to discourage him in contemplating subsequent examination or treatment.

Office, Wesley Memorial Hospital.

The following scheme has been adopted at Wesley Memorial Hospital, Chicago, affording quite ideal arrangement of apparatus as well as a pleasant place. The accompanying diagram indicates the arrangement of the rooms on both sides of a corridor extending the full length of the department. One entire floor of a wing is devoted to the department. The arrangement of the rooms may be seen by consulting the diagram on page 29. However, some special features merit particular mention.

The dark room is of rather unusual size as seen on the diagram and has a full size window giving the technician fresh air and sunlight at intervals when undeveloped plates are not being handled.

The high tension transformer and rectifier enclosed in room 4 affords a supply of air from outside which serves to keep the apparatus cooled. The small corridor between room 4 and the treatment room gives access from the main corridor to the control room without passing through the treatment room, and also serves to insulate the treatment room from the apparatus in room 4, reducing the noise to a minimum and eliminating the disagreeable noise and odor that increase the tendency to disturb the patient under treatment. The deep therapy room No. 6 is lead lined throughout including ceiling and floor, with a double thickness of lead on the floor under the treatment table.

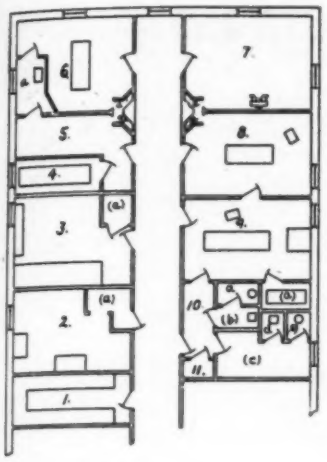
Rooms 8, 9, and 10 are connected as in one suite, making it possible for the patient to go from either dressing room to the fluoroscopic and radiographic rooms without going into the main corridor. This is especially convenient in colon examination with barium enema.

Installation of apparatus is shown on the diagram. The rotary converter for the fluoroscopic unit and the transformer for the large radiographic machine are installed in a small room marked A opening from room 9. The fluoroscopic and radiographic apparatus are connected by overhead to rooms 8 and 9 which give a flexibility in the operation of these machines by making the use of them interchangeable by switches in the overhead.

The waiting patients are accommodated partly in the main corridor, but mainly in the combined reception room and library which is on the main hospital corridor near the entrance to the department proper.

Small corner closets are found in several of the rooms which serve to keep accessories where they will be in order and convenient and avoid the confused appearance of a room with accessories lying about.

In addition to the rooms set apart for these



1. Filing room.
2. Developing room.
   (a) Labyrinth entrance.
3. Diagnostic room.
   (a) Closet.
4. High tension transformer and rectifier room.
5. Corridor.
   (a) Corner closet.
6. Deep therapy room.
   (a) Control booth.
7. Office.
   (a) Closet.
8. Radiographic room.
9. Fluoroscopic room.
   (a) Snook transformer and rectifier and small rotary converter.
10. Corridor.
    (a) Men's toilet.
    (b) Men's lavatory.
    (c) Ladies' dressing room.
    (d) Ladies' lavatory.
    (e) Ladies' toilet.
11. Linen closet and film store.

various functions, a demand for radiographic work on patients who are difficult to move from their beds, has been met in the following manner. The small beds of the house can be moved from the rooms and brought into the main corridor of the department. Extension wires are used to connect the tube stand which is brought into the corridor and placed at the bedside. Exposures can then be made as easily as they could be made in the room with a portable machine and with the important advantage of the use of higher voltage which is superior in quality of plates. Higher voltage, moreover, affords greater penetration, and more exposures may be made with several adjustments as in fracture cases with less danger of burning the patient. The proportion of penetrating rays with high tension being greater than with low tension, the rays produced by high tension apparatus are less liable to burn than the soft rays of low voltage.

It will be observed that all rooms of the department, with the exception of the filing room have windows which furnish fresh air and sunlight as desired, an important feature, as the personnel of the laboratory should have as much sunlight and fresh air as possible. Operators and others exposed to repeated small doses of x-ray are also breathing certain gases evolved as well as accumulating x-ray dosage which frequently causes undesirable blood changes. The rooms of the department are finished in neutral color, principally gray, which contributes not a little to the comfort of both patient and personnel.

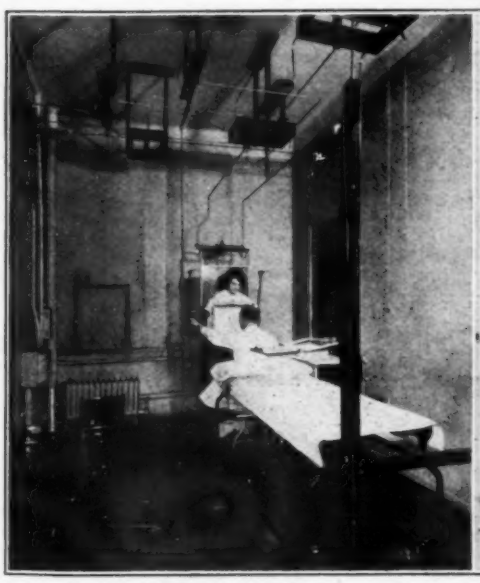
Selection of apparatus for carrying on work of the department will vary in the judgment of different roentgenologists, but for the reasons above stated the arrangement of rooms is a question allowing variations only as it will afford conditions somewhat similar to the ones that have been effected here.

The administration of the x-ray department involves many details that are necessary in order to save time and promote efficiency in conducting the work. The functioning of the department requires that the examinations should be made largely from suggestions by the attending physicians and that a report should be made of the x-ray findings, this report and the films to be available for reference at later dates.

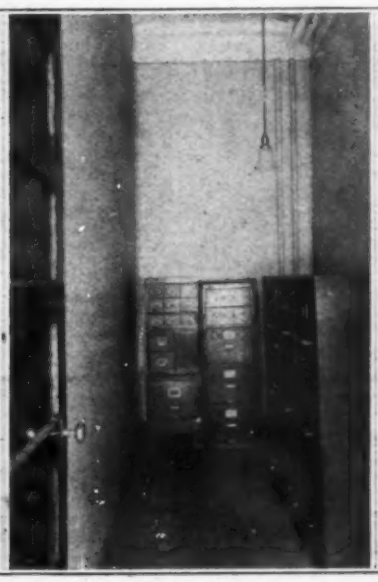
It will be found desirable to have the patient bring a written request from his physician, giving the date, hour, name of the patient, part to be examined, suspected lesion; and, if the patient is in the hospital, the case number and the number of the room or ward. This request should be signed by the physician or his intern.

Complete Filing System Needed

Reporting and filing requires the establishment of some system of identifying all the plates and

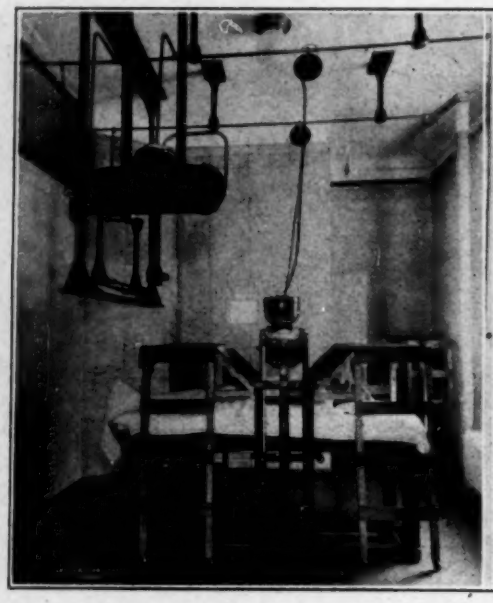


View of fluroscopic room.

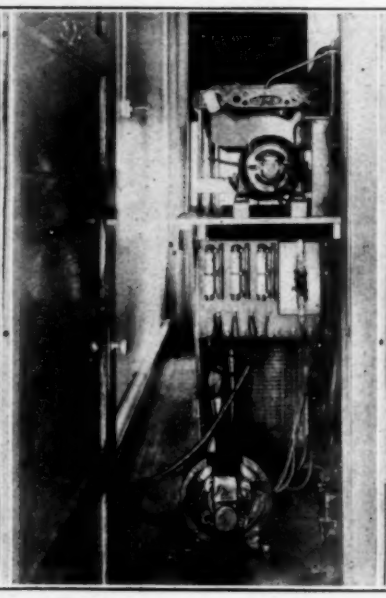


The filing room.

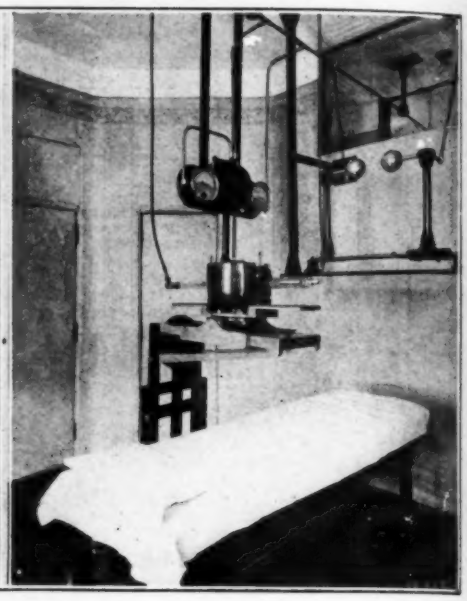
The radiographic room.



The patient behind the bars is merely undergoing a deep therapy treatment.



View of high tension transformer.



Deep therapy room showing the placement of apparatus for treatment.

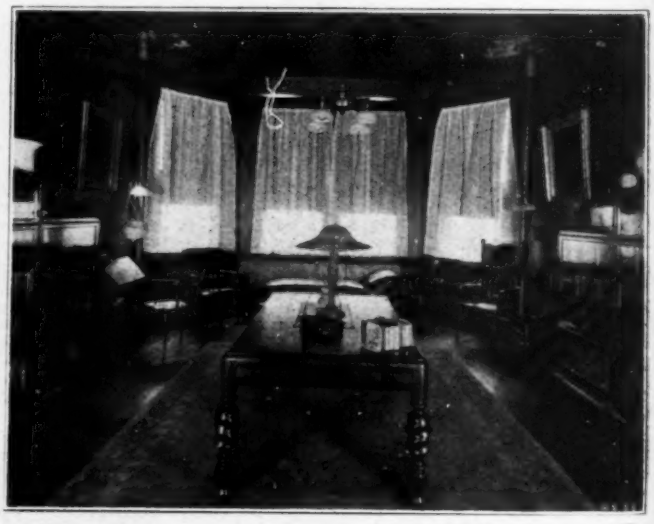
papers relating to the case. The first thing to be considered is an adequate marking of the films or plates. This can be best done at the time of the exposures. It saves trouble caused in attempting to mark them later since there is enough similarity in the plates of a number of cases to be confusing. Some of the plates, moreover, may indicate pathology. A numbering system by which all the plates are given the serial number of the case will simplify the rest of the records as all papers and cards relating to the case will carry the same number.

A system of filing more or less complete is necessary. The items cared for in the files at Wesley are as follows:

A card index is arranged alphabetically according to the patient's name, bearing a serial number, name, part examined, date, referring physician and diagnosis. Another card file is arranged alphabetically according to the physician's name under which are filed the individual cards of their patients. Reports of findings are filed according to serial number. Physicians' requests are kept in a similar file since it frequently occurs that there is some discussion as to what was specified on the requests. All films are filed in steel cases according to serial number. If the serial number is included in all of these items it will be readily seen that the first card index giving the patient's name and serial number is the key to the requests, reports, and films.

To carry on work in this manner, the assistance required is in proportion to the volume of work. For example, the force may comprise an assistant to do all radiographic work, a developing room assistant and, if therapy is done on a separate machine, a technician to attend to the therapy apparatus under the direction of the doctor. A stenographer will take care of reports and correspondence as well as keep the files.

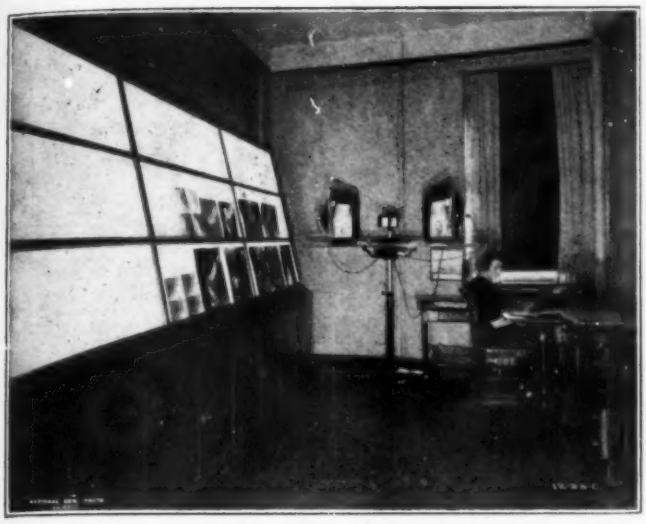
Grouping of cases for certain work is of advantage in fluoroscopic work. This is especially true, since the operator requires some little time to adjust his eyes to conditions in the darkened room. If it be necessary to alternate fluoroscopic



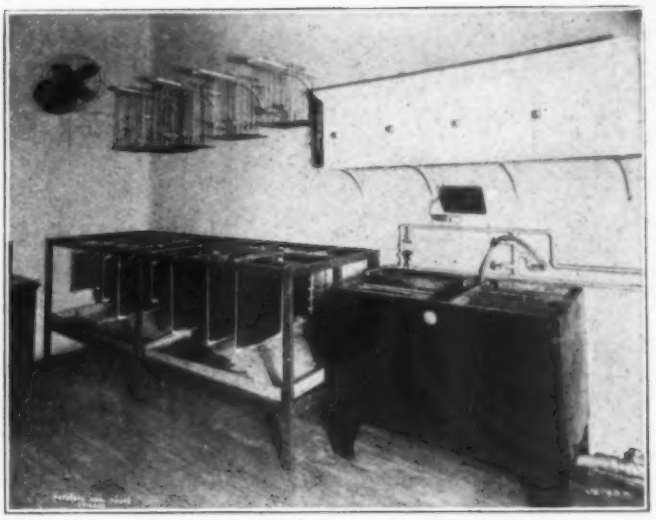
A glance at the reception room shows the comfort and home-like atmosphere that it has.

cases with other work, there will be a considerable loss of time in adjusting from dark to light and again from light to dark; also it will place an unnecessary strain on the eyes of the roentgenologist.

The practice of giving opinion based on wet plates or films is, to say the least, hazardous. Certain details are not shown on the plates when wet,



The diagnostic room.



The developing room.

also some apparent findings on wet plates will be found to have disappeared when the plates are thoroughly dried. Many referring physicians, in their anxiety over their cases, request findings of the roentgenologist before the plates are even thoroughly washed, thus putting him at a considerable disadvantage and possibly placing him under the necessity of changing his report after examining the dried films. Films should ordinarily be read the day following exposure, giving them time to dry thoroughly except in special cases when the laboratory equipment includes a method for rapid drying. Stereoscopic plates, especially, require sufficient time for the hardening of the emulsion before being placed in the shadow boxes.

This much may be done with wet plates. In examining a patient from out of town, or when a retake later would occasion considerable difficulty, as in the instance of a very sick patient, plates may be observed to ascertain if they are suitable for examination. If not, then others may be taken immediately.

Adapt Laboratory to Needs

In establishing a laboratory it is well to look over a number of laboratories and departments in order to determine the apparatus and scheme of installation best adapted to the individual needs. Of items in the line of apparatus which are most desirable and which should be included where possible are the radiographic machine, vertical and horizontal fluoroscopic apparatus, and arrangement for making chest plates stereoscopically in the upright position. If the roentgenologist intends doing any considerable amount of therapy he will be justified in installing apparatus especially for this purpose and particularly if deep radiation is to be done.

It is most important that the department be conducted so as to make the examination and report of cases at the earliest possible time in order to co-operate effectively with the physicians who are anxious to arrive at a diagnosis. To this end all the material, plates, and records should be available on short notice for future reference. Do not, moreover, overlook the considerable advantage of causing the patient as little annoyance as possible while in the department.

HOME ECONOMICS MEETING SCHEDULES MANY PROMINENT SPEAKERS

Many who have attained prominence in home economics and allied fields are scheduled to appear on the program of the American Home Economics Association Meeting to be held in Chicago July 30 to August 3.

A few of the speakers who will appear on the programs, as published in the June issue of the *Journal of Home Economics*, are: Ernest Dewitt Burton, president, University of Chicago; Charles H. Judd, director of education, University of Chicago; Alice F. Blood, president, American Home Economics Association; Donald Nelsonn, Sears Roebuck & Company; Ruth Wardell, extension department, University of Illinois; Helen Atwater, editor, *Journal of Home Economics;* Ernest G. Stevens, vice-president, La Salle Hotel; Katherine A. Fischer, Columbia University; Rena Eckman, Michael Reese Hospital; Cora G. Colburn, University of Chicago; Minna C. Dentien, Office of home economics, Washington, D. C.; and Dr. Anton J. Carlson, department of physiology, University of Chicago.

The program will be of interest to dietitians in hospitals and those engaged in the field of dietetics.

UNSCRUPULOUS AGENTS DETECTED

It has been brought to attention that at least one agent is using unscrupulous methods to sell table cloths and woolen materials to hospitals. Superintendents and others in charge of purchasing in hospitals are reminded to take cognizance of this fact.

All that is human must retrograde if it does not advance.—Edward Gibbon.

THE STATE HOSPITAL AND POLITICS*

The past few years have witnessed the passing of many forms of the spoils system from hospitals generally, but a few traces of that surreptitious evil are still evident in state hospitals. "To the Victor belongs the Spoils" still holds good, unfortunately, in many instances in state institutions for the mentally afflicted. There is no longer the old race for "jobs" by conniving politicians but there is yet too great a political leeway for shrewd business to wring its profits from the state hospital. Experience shows that their standards have risen parallel with their freedom from political impediments, and they will continue to rise only as they become more independent of selfish individualism.

POLITICS has constituted a stumbling block in the progress of state hospitals. It is not quite so pernicious an influence today as it once was but in some states it still plays an important obstructionist role in the advancement and development of work among the mentally afflicted.

Politics operates in two directions, either molesting directly the management of the institution by demanding for favorites the positions of honor, salary and influence and the contracts for supplies, repairs or new structures, or as an inherent element in our governmental system, interfering with tenure of management and breaking the line of policy.

Politics Fast Disappearing

Considering the first phase of this subject, it is only fair to say that politics is an evil which is fast disappearing. It is mentioned here not because it is a serious menace to state hospital service but because its diminishing form is an acknowledgment of the power of wholesome public opinion. The old political spoils system of state hospital administration and management has passed in almost all states and in the remainder it is passing, because the individuals who pay the taxes and whose friends and relatives are patients will not permit it to remain.

The public attitude toward this branch of the state service has changed from that of neglect or indifference to that of humane thoughtfulness. The public has learned much about mental and nervous diseases that has served to quicken its attention to the duty the state undertakes to perform. The obnoxious phase of political spoils that remains is insidious and covert. It is to this that the public has yet to direct its shafts. Politicians are no longer much concerned about the positions, "jobs," as they are known. They are likely, however, to permit themselves to be interested on behalf of merchants, jobbers, contractors who want a share of the immense business that the state hospital has to give. One of the surprising disclosures of the writer's investigations was the unconscionable heartlessness toward these institutions shown by merchants, jobbers and contractors whose reputation for philanthropy and justice was high. They seemed to regard the insane as proper subjects on whom to skimp and practice fraud. They depended upon powerful political influence not only to hand contracts for them but also to protect them in passing under-standard supplies and construction. The public institution, from the jail and poorhouse to the state prison, state hospital and university, seems to be, for these classes of business men, a fair market for their shop-worn and defective goods.

Public Eye is Suspicious

It is not at all surprising that there prevails in the general public mind the suspicion that the patients of state hospitals and inmates of other public institutions are not well fed, properly clothed or adequately housed. This is, indeed, a severe indictment. It is, however, not deserved in all of the states, for some have reached that stage where they can and do control purchase and delivery very much better than others, but it is doubtful whether political influence does not in the majority of the states, attempt frequently and sometimes successfully, to dictate in these matters. Another evil of this character is found in the selection of sites for new institutions. It is seldom, indeed, that political forces do not play an important, if not the controlling role, in the choosing of a site for a new institution. And generally, back of the inspiration for political interest in this question, is the desire of a worthy or important constituent to sell a site to the state. Very many institutions may be found today in locations that cannot justify themselves. History, however, will tell the story how they came to be where they are. A few years ago a mid-west state decided to build a new state hospital. The need for it was conceded to be in a metropolitan district but the politicians located it 300 miles away in a rural district, where

*This is the fifth of a series of articles on state institutions for the mentally ill which is being prepared under the direction of a special committee of the editorial board of THE MODERN HOSPITAL, in cooperation with the National Committee for Mental Hygiene and Mr. A. L. Bowen, former superintendent of charities of the department of public welfare.

two hospitals were serving adequately. Annoying and humiliating as these things are to the conscientious and honest man of science and heart, it is encouraging to know that the evils are in hand and that they no longer seriously impede medical and psychiatric advancement.

Evils Due to System of Government

The other manifestation of politics results from inherent virtues or evils of our system of government, consequently it is more difficult to control or to shape. The head of our government frequently changes. The governor of a state is a policy shaping authority. He generally goes into office with some purpose or objective in view. Often it is a promise to the people that he will reduce taxes. Their faith in that promise has elected him. Naturally he makes an effort to redeem his pledges. The state charities which consume a third of the public revenue cannot escape gubernatorial attention, and they are affected by the change in government, sometimes to a small extent, sometimes very seriously.

The greatest damage is done by interruption in the development of a policy that the preceding administration may have inaugurated and the new one decides is wrong, or can wait. The governor is supreme, if he desires to exercise his power over these institutions. He may display it in the smallest details; as, for instance, when the executive of a southern state three years ago engaged in a dispute with the board of trustees of a state hospital and the architect, on the question of whether a new building should have a porch or not. The controversy resulted in a junket by the trustees and architect through the northern states to learn what should be done.

Breaks in the tenure of office of boards, commissions, or directors in charge of these institutions are unfortunate. One of the things that state hospital service needs is a consistent, liberal, well-sustained and continuous policy with respect to its expansion and its therapeutics.

The states which have made greatest and most substantial progress in these matters are those which have done best in maintaining in office of administrative responsibility men and women who have shown adaptability and capability in this field. They have found it possible to carry policies over a period of years with beneficial results. Experiments which proved successful are in practice. Those which did not work were discarded. Economies have been devised. Systems of accounting and principles of therapeutics have been established. The physical plant has been put into better repair, and new buildings represent the best thought of the day in plan and construction.

If the country is to have state hospitals comparable to general hospitals in care, treatment, and scientific attainments it is vitally necessary that administration and management be regarded and respected as they are among general hospitals, or in business or industry where continuity of policy is recognized as essential. Financial support likewise must be consistent and regular.

Public Attitude an Important Factor

Laws and forms of organizations established by law may be helpful in promoting the cause of good administration and better care and treatment but, after all, even these will fail if the government itself is not infused with good ideals and if the public is indifferent toward its state hospital service.

While breaks in tenure of administration may be inherent in our system of government they can be reduced or held in check if public sentiment is wholesome and intelligent and stands back of the state hospital.

The spoils system has been wrenched loose in nearly all states from its bold, selfish hold upon these institutions. The next step is to place their administration and financial resources upon a business basis having continuity. The public will take care of this situation when it recognizes the importance of doing so. The work of a state hospital is progressive; it grows from month to month. New fields appear every year for it to occupy. The number of patients grows. The necessity for increases in appropriations becomes more and more acute. It should not be stimulated one year and suppressed the next. Hits and misses, starts and stops are equivalent to standing still. This situation to which we attach much importance is remediable only through the education of the popular mind. This service must have the assistance of organized propaganda, and of lobby in the general assembly in order to represent intelligently the interest of the mental and nervous sick; just as agriculture, hard roads programs and educational institutions have the benefit of organized propaganda and an intelligent lobby in every session of the general assembly. Legislators will not neglect the sick in the state hospitals, if the well appear in their behalf in sufficient numbers to be impressive.

Continuity of Policy Needed

This plea is made for a continuous policy of financial support and institutional expansion. It includes the creation of better acute service in the hospital; the erection of detached wards for the physically sick; the introduction of occupational therapy on a scale that will get maximum results;

hydrotherapeutic facilities; social service; training schools; sufficient medical staffs; better recreation, and, out in the civil population, the mental dispensary and clinic.

The state hospital must be recognized and treated as a technical and professional function of government that may not be interfered with at will by the lay or political mind simply because it offers a place where economies may be practiced in the interest of a political pledge. This service should be free and independent; as free and independent, as the system of civil hospitals throughout the United States.

Standards Rise with Liberty

Standards of state hospital service have risen as state hospitals have gained independence and liberty from hampering associations. They will continue to rise only as that independence and liberty are increased and safeguarded. Scientific attainment is not possible, as long as such extraneous influences which are selfish, often ignorant, often unfeeling and unsympathetic, impede its progress. Independence and liberty may be promoted by good laws. They may be promoted by honest and broad men as governors and legislators. They may be promoted by a public opinion that is alert, intelligent, and determined that the humane work of the state shall not be debauched and debased for spoils or selfish purposes or sacrificed to what we are apt to consider a necessary evil in our American form of government.

A. M. A. PUBLISHES 1923 LIST OF APPROVED HOSPITALS

The American Medical Association, through its Council on Medical Education and Hospitals, which handles the hospital work for the Association, has just issued its 1923 list of Hospitals Approved for Internships. The list is published in the eighth edition of the *American Medical Directory*, which is just off the press, and also in separate pamphlet form for distribution to hospitals, medical colleges and prospective interns. The number of hospitals on the approved list of the Council to date is 654, with a capacity of 187,314 beds and an aggregate 3,671 interns.

The number of interns now serving in hospitals is approximately 4,000, but to supply the actual demand for interns in all hospitals asking for them would require almost 5,000. There is at present, therefore, a shortage of approximately 1,000 interns. This does not take into account the hospitals which desire interns, but which are not asking for them on account of the shortage. This shortage cannot be supplied from the ranks of the graduating classes this year because the total number of graduates will be scarcely above 3,000. In 1924, however, there will be approximately 3,800 graduates and in 1925, 4,500.

When the hospitals began to feel the shortage of interns about a decade ago, they quite naturally resorted to pecuniary appeals and offered salaries, usually ranging from $25 to $100 per month and maintenance, but without much of a response. It is now quite well understood that the appeal must be made on the basis of educational opportunities offered, rather than financial remuneration. There are still a number of hospitals that pay their interns—and there can be no objection to giving interns some financial help—but those which easily secure interns, or which have waiting lists, are the hospitals whose staffs are known to furnish the best educational opportunities even though they pay no salaries whatever.

The increasing standards in medical education account for the growing popularity of the fifth year in medicine to be taken in a hospital. Ten state licensing boards are requiring the internship as a prerequisite to licensure, and nine medical colleges require it before granting the M. D. degree. Of still greater significance, however, is the fact that regardless of any requirements approximately four-fifths of the medical graduates obtain internships. The problem of securing interns, therefore, is that of making it educationally worthwhile, whether or not there is remuneration.

Lists of Approved Hospitals

In order to aid hospitals to establish worthwhile internships, and also to direct medical graduates to the best internships, the Council on Medical Education and Hospitals in 1913 began a survey of hospitals that used or desired interns. As a result the first provisional list of hospitals furnishing acceptable internships was completed and published in 1914. Subsequent lists have been published in 1916, 1921, and 1923. The number of hospitals on the first list published was 603 with a total capacity of 150,182 beds, and furnishing 3,095 internships, as compared with the present list which contains 654 hospitals with 187,314 beds and 3,671 internships. This list could easily have been made larger, but while other hospitals providing acceptable internships have been added, still others which fell below the requirements have been removed from the list.

The Council has its well defined schedule of essentials in a hospital approved for the training of interns, which has been followed in the consideration of more than 1,200 hospitals that have applied for admission to the Council's approved list.

The hospital survey report blank covering all of the essential facilities and functions of a hospital is furnished each institution that desires to be accredited. The data thus obtained are submitted to the hospital committee of the medical society of the state in which the hospital is located—a committee, which is in the best position to evaluate the opportunities which the hospital affords for interns. The recommendations of this committee are considered along with the data supplied by the hospital and the abundant information in the files of the Council.

If the hospital is found to be in position to furnish acceptable internships it is placed on the list and a notice of such recognition is published in the *Journal of the American Medical Association* and the name thereafter appears in the pamphlet which is distributed to hospitals, medical colleges and graduates seeking internships. If the hospital is found to be lacking in certain particulars, a report setting forth such deficiencies is sent to the superintendent or the staff in the hope that the hospital may make the needed improvements. Hospitals are removed from the list when they no longer desire interns, or when they fall below the required standards. Of the 603 hospitals on the 1914 list only 314 remain, while 340 other hospitals have been added. This gives some idea of the care with which the work has been conducted.

PUBLICITY THROUGH THE SPOKEN WORD*

By RALPH WELLES KEELER, Counsellor in Publicity of the Board of Hospitals and Homes of the Methodist Episcopal Church.

The newspaper is not in itself a sufficient publicity agent for the hospital; it needs to be supplemented by an intelligent publicity through the spoken word. There is a broad field as yet almost unexplored for the men and women who are capable of presenting the message of the hospital in a clear and interesting manner. This calls not only for a thorough knowledge of the inside workings of the hospital, but also for a personality which is able to present the facts so that they make a direct appeal to every class of people. The possibility for putting across the mission of the hospital to the masses has a very definite future; it is a service worthy of study by those who would extend the message of the hospital.

VALUABLE as is the hospital message printed in the daily press, this channel of communication must not be depended upon solely for publicity purposes. There are many who should know of the service rendered to the community by the hospital who will fail to get this in their hurried reading of their daily paper. There are countless others who have either not formed the habit of reading the papers every day, and hence miss the issue in which the message is printed, or else read a foreign-language paper in which the message does not appear. Moreover, the message in the press must be so written as to catch the eye and attention of all ages and classes, and hence often fails to bring a message from the particular angle that would appeal to special age interests or particular groups.

Therefore the valuable help given to the hospital by the newspapers, which value is not to be discounted in the least, must be augmented by other methods. Chief among these other methods is the presentation by the spoken word. And to many, the spoken message is more convincing because it has the force of a living personality back of it, one who comes straight from the activities and ministrations of which he speaks. It is wise, therefore, to consider some of the things to be borne in mind in connection with this method. An ordinary speech full of trite sayings concerning the blessings of the hospital to people in general is little better than no presentation at all. The speaker and the content of the message must be selected with great care. And he who stands before any group of his fellows to make the hospital alive to them must be convinced beforehand of the need of careful preparation of the material he is to use. He must study both the occasion where the speech is to be delivered and the characteristics of those who are to be his listeners. He must also be versed to some extent in the theory and practice of public speech. If these important matters are attended to conscientiously, the results in secured interest and understanding will beyond the shadow of a doubt far outweigh the time and effort put into it.

It is not to be supposed that there will be a great demand for speeches from a representative of the hospital when this method of presentation is first adopted. Indeed, very few opportunities of any kind come unsolicited or without the friendly office of someone able to point the opportunity to our door. But while this is true, there is no reason why a demand should not be created in a comparatively short time. It was not so very long ago that the suggestion that a college professor be asked to speak at a public function was ridiculed out of the program committee. Yet, today, college professors are demonstrating that while their profession is an academic one they are nevertheless serving the public at large in the research work they are doing and in the studies they are pursuing. And they are to be found in constantly increasing numbers among the popular speakers at all sorts of occasions, because they are bringing to the public helpful knowledge interpreted in the concepts and language of John Smith and Mary Jones. The change has come about in part because of a new type of college professor, but their debut in this field has also been helped tremendously by the alumni and alumnae of our colleges and universities.

In order to create this demand for public presentation of the service and needs of the hospital, it is first necessary to study the possible occasions at which such a presentation may be made. Nearly every community large enough to support a hospital will furnish a considerable number of suggestions. Talk the matter over with the mayor and point out to him the relationship of the work of the hospital to public health. Seek his services in finding a place on some of the programs of which he is able to shape the list of speakers. Consult with the president of the chamber of com-

*This is the third of a series of articles on hospital publicity prepared for THE MODERN HOSPITAL by Mr. Keeler. The preceding articles appeared in the May and June issues.

merce and interest him in the significance of the hospital to the business enterprise of the community. Ask his cooperation in securing opportunities for a speaker from your institution. There are also the Rotary and Kiwanis clubs and similar organizations whose leaders would help to make possible a presentation at their meetings. Women's clubs would welcome this sort of thing. Boards of education would cooperate so that the children could learn of the hospital. Leaders among foreign-speaking groups can be interested in the same sort of a proposition.

In working on these fields of opportunity, however, do not use the word "presentation." It savors too much of propaganda. And while propaganda is a part of what you desire, it is a channel for the dissemination of helpful knowledge that you are chiefly seeking. The propaganda will come from a faithful and intelligible delivery of the information. To this end, have definite subjects to propose. Also have particular speakers to suggest. When you have your first contact with the people suggested, be ready to offer a man and concrete theme on the spot; or better, several from whom the one most wanted can be selected.

In this last connection it is well to be alive to the special opportunities which prevailing epidemics offer. It matters not whether it be chickenpox or the "flu," diphtheria or infantile paralysis, it makes possible addresses by members of the staff on the disease itself, the general care the public should take and the wisdom of calling in a physician. This makes possible a statement as to what the hospital and staff are doing to combat the disease. Such alertness tends to timeliness in the subject material and hence emphasizes in the mind of the hearer the close relationship of the hospital to every day affairs.

Selecting the Speakers

There are three types of people in every institution. One type is unable to do a certain thing well but insists upon trying to do it. The second type can do the thing well but will not tackle it. The third can and will. And among the first two types there exists a wide range of sensitiveness. The first are offended if not permitted to function. The second, though they refuse, are offended if not invited to function. These conditions are normal. And when they exist in a hospital the same as they do elsewhere, it is merely because physicians, surgeons, nurses and administrators are like all other human beings.

But a conference of all concerned will do a great deal toward removing this kind of difficulty. Make it perfectly clear what it is hoped to accomplish. Point out some of the requirements that need to be met. Ask for that cooperation and team work that will make for a greater hospital in the days to come. And then play the game squarely yourself, by giving every man and woman able to do the job an equal opportunity to come before such groups for which his or her special field furnishes a message. If there are some who have no special message and are able to go before an audience in a convincing way, use them for the more general addresses that may be in demand. The selection of your speakers calls for great tact. It should be done in a wise and statesmanlike way. If done in a bungling manner, it will ruin the good you hope to accomplish.

The Content of the Message

Every public speaker naturally prefers to deliver a message that is peculiarly his own. But in all campaigns of propaganda, the message of the cause or institution to be put before the public must be included with what the individual may desire to present from his own angle of information or interest. This means teamwork in the matter of the content of the message. Otherwise all the effort made to secure opportunities for speakers will fail to produce the results for which the hospital is working. The speeches may all be excellent as far as diction and oratorical power are concerned, and the audiences may be greatly interested and pleased, but that, however, is not all that is sought. There must be something that makes every audience carry away a vivid realization of the significance of the work being done for the community, if the messages are to be successful from the standpoint of the purpose we now have in mind.

It is necessary, therefore, to decide definitely on what the hospital wants the public to know. There are a number of things that will occur at once. One thing that always gives confidence in an institution is to know what its income is, the source of this income and the manner in which funds are expended, as well as the auditor's statement concerning such expenditures. There are altogether too few financial statements that are intelligible to people not versed in financial matters larger than the handling of their own wages or salary.

It is of interest to know what are the operation costs, salaries, equipment for nurses, medical and surgical supplies. A romantic story can be told of the cost of maintaining ambulance service, using typical experiences to prove the value of the cost. This is true also of the pathological laboratory the immunology department, the kitchen and pantry, laundry and similar departments. Such figures as an annual expenditure of $7,054 for bread, $15,099 for milk and cream, $16,332 for groceries,

$14,810 for butter and eggs, $13,435 for fruits and vegetables and $33,205 for meat, poultry, and fish, are facts that give a stimulus to general thinking with reference to the actual expense of taking care of the sick and injured.

The number of people employed and the range of employment in which they are engaged should be made clear. If there are 220 patients in the hospital at the beginning of the year and 6,533 are admitted during the year and 6,511 were discharged during the year, it is of interest to give an analysis showing that 2,915 were cured, 2,703 left improved, 478 unimproved and that 415 died, together with some of the facts dealing with typical cases cured, as well as reasons for those discharged unimproved and the particular diseases which resulted in the death of the patients. This one phase of information will help to dismiss the feeling too often prevalent, that it is fifty-fifty that you die if you become a hospital patient.

Statistics Made to be Interesting

It is of interest also to know that of a total of 90,669 patient's days of treatment in a certain hospital 11.92 per cent were in the free ward, 10.20 per cent were city patients, 2.18 per cent occupied endowed beds, 54.85 per cent were in the pay ward, 19.80 per cent had private rooms, and 1.05 per cent were members of the staff and nurses. The emergency ward where come the grist of accidents by day and by night, social service activities, the miraculous ministry of the x-ray and the dispensary, give further human interest material with which to illustrate alike the use of the hospital's income, and the marvelous work the hospital is doing.

It needs no argument that one whose field is medicine would prefer to confine his spoken message to his own fascinating work, or that the surgeon should have a desire to discuss recent operations of interest to him rather than to deal with what medicine is doing for people. But if the physician and surgeon will each make his own field the special emphasis of his address with some of the ideas just mentioned as the background for what he says, those who listen will go away with both a knowledge of the total service of the hospital and a new interest in the special matters emphasized.

In order that the message may have this added content, it is necessary that some one prepare the material in such form as to make it usable without much labor on the part of the speaker. This may be done by developing a series of "talking points" on every phase of the hospital's work. The material for these "talking points" should be furnished by the responsible head of each department. They should then be put into shape by the person charged with the publicity work of the institution. And finally, the "talking points" should be gone over by the one furnishing the material and the one who arranges it, in order to be sure that no fact has been distorted in the re-arrangement, and that the implications of each statement remain unchanged. This prevents error and also removes any feeling, say on the part of the specialist in orthopedic surgery, that a layman, as the publicity man is likely to be, is venturing to act as an interpreter of something concerning which he has but a word knowledge.

Careful Preparation Essential

The public address that gets across what the speaker desires his hearers to possess as a part of their future thinking and their motive for future action, must be prepared with great care. The man who explains to his audience that he has not prepared what he is going to say does not need to make such an explanation. The audience will become aware of that fact during the first five minutes. And the feeling that a speaker has not made careful preparation acts as an insult to the intelligence of an audience.

The need of emphasizing this right here is the fact that many of the men who thoroughly know their specialized fields are lost when obliged to stand on their feet and address their fellows. This is true also of many successful business men and bankers. They have neglected to develop the ability to speak in public, and when the time arrives when they need to go before others in a convincing way, they are at a tremendous disadvantage. Some, however, though they be in middle life, realize this fact and take private lessons in public speaking. They are willing to undergo the humiliation, if it is such to them, of having some one that knows how put them through the paces they neglected to go through when younger, in order that they themselves may give utterance to their thoughts and not be obliged to have others of lesser knowledge, but more fluent in speech, do all the talking. Others, unable or unwilling to do this, study some of the several excellent text books on public speaking which are now available. Either method is well worth-while.

In preparing an address on the work of a hospital, it is well to bear in mind that the terminology of the medical profession is Greek to the average individual. They even wonder at the cabalistic signs on the prescription which secures for their babes soothing syrup at the corner drug store. Roentgenology doesn't sound like even a distant cousin to the popularly known x-ray; nor does dermatology mean skin diseases to the un-

knowing. And what do gynecology, physical therapeutics, neuro-surgery, otology or ophthalmology mean to the way-faring man? They can be made to mean much, however, by their translation into words which people use in every day life.

Care should be taken to put the material in pedagogical form. The day of spread eagle oratory has passed. People want to be taught when they listen to a speaker. The teaching method must be used, all the time remembering, however, that the audience is not composed of medical students who are obliged to listen to a set number of lectures as a part of their medical training. Assume, at least, that the audience has little or no background of what you have to say, and be elementary and logical in your presentation.

It is seldom wise to read an address to other than technical audiences. The element of spontaneity is lost. The address grows heavy. There is no opportunity to take a fresh hold when interest lags, and the popular mind is inclined to think that you are not any too well acquainted with your subject.

With preparation which embraces the suggestions here made, and with a definite purpose to be simple in statement, clear in enunciation and brief in the time consumed, the chances are good that the impression made by the message delivered will be one that will abide.

There is a wise professor in a prominent postgraduate school who taught his students to make every public appearance an event. This is helpful advice. Every address delivered is the one opportunity for getting one's message across to the particular audience before which the speaker stands. It is his hour. And with a theme like the fine humanitarian ministry of the hospital, there is no audience that cannot be stirred to its deepest sympathy, appreciation and future interest. One should fairly glow with such an opportunity before him. Coming out of the atmosphere of the needs of those whose bodies are diseased or broken, alive with the memories of the experiences gone through personally and of others observed, with a broad background of technical knowledge to translate into the romance of every day and with a well prepared address—who would not envy such a speaker his hour before the people!

In such an hour it is well to be careful lest an air of condescension creep into the discourse. If criticisms of the hospital have been rife, do not act as though you were there to defend the hospital at all costs. Give the facts in each instance, explaining away the criticism if the facts warrant it, but acknowledging mistakes if they have actually been made. Talk with the audience rather than at them. Encourage questions at the close of your address. And throughout your address seek to stimulate those whom you are addressing to form questions in their minds as you go along. For every questioner who has his question answered satisfactorily goes forth as a propagandist for the hospital on the subject in which he showed a personal interest.

The spoken word, if well spoken, will make many friends for the hospital. And the appearance of representatives of the hospital as speakers at public functions will do much to create a recognition on the part of the general public that the hospital is a real part of the community—the place to which each when broken physically, may go to receive the ministry that cannot be given so well in the home, so that they may once again take up the tasks and opportunities of life with that vigor which a restored body makes possible.

PROPOSED HOSPITAL AT FORT BENNING

Plans for the proposed Station Hospital to be erected at a cost of $275,000 at Fort Benning, Georgia, have recently been given out by the Quartermaster General of the U. S. War Department.

The proposed hospital is to occupy a site on rising ground about 1500 yards from the center of the parade ground at Fort Benning and will have a view practically of the entire activities of the post. It is planned at present to erect a main building with a kitchen and mess in a separate building in the rear. The main building is to have a central portion three stories and basement high with ward wings at either end consisting of basement and two stories. The outside walls and partitions will be of hollow tile. The outside walls will be finished with stucco, the floors and columns will be of reinforced concrete and the roof of Spanish tile.

The building will provide for 120 beds and will be so designed that new wards can be readily added in the future, as may be desired, without interfering with the operations of the original building.

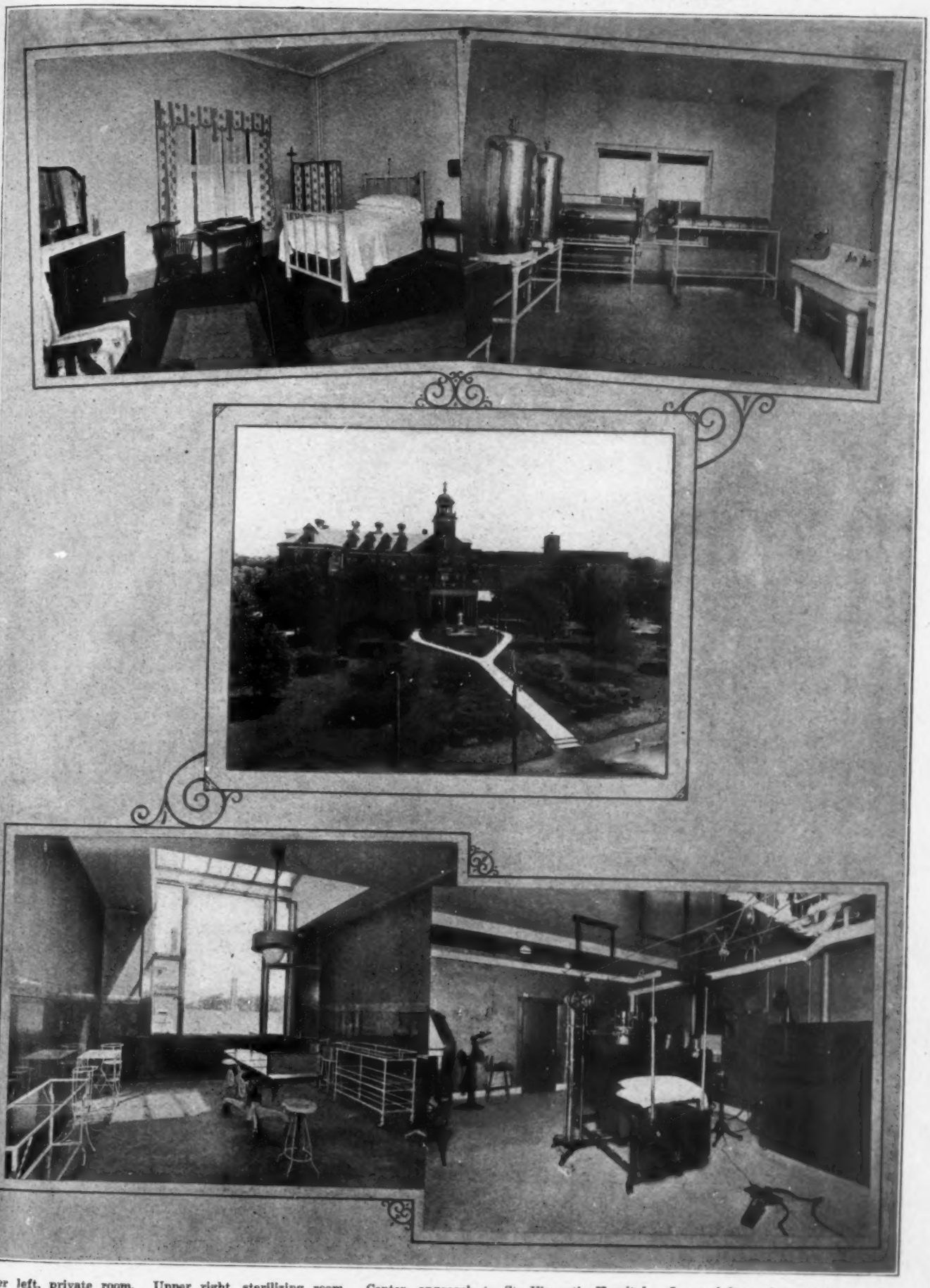
The basement of the main building will contain the examination and treatment rooms, x-ray section, eye, ear, nose and throat clinic, dispensary and laboratories. The first floor will contain the administrative offices, the dental department, the wings being entirely free. The second floor will be given over entirely to wards with the necessary diet kitchens and utility rooms. The third floor will contain an operating section and a few small wards and will give access to large solaruims on the roof of either wing. Large screened porches will extend around both wings.

The kitchen and mess will be contained in a one story building, in the basement of which will be installed the heating plant for the hospital. The remaining space will be used for storage. Plans are also being made to provide quarters for nurses and for the medical detachment.

INSTITUTE FOR NURSES TO BE HELD IN CHICAGO, SEPTEMBER 9-14

An institute for nurses will be held in Chicago under the auspices of the Illinois League of Nursing Education from September 9-14. The institute will be held in the lecture rooms of the Y. W. C. A. at 59 E. Monroe St. It is announced that dietitians are welcome.

ST. VINCENT'S HOSPITAL, WORCESTER, MASS.



Upper left, private room. Upper right, sterilizing room. Center, approach to St. Vincent's Hospital. Lower left, major operating room. Lower right, x-ray operating room.

The MODERN HOSPITAL

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SOME FALLACIES IN COOPERATIVE BUYING

Many of our readers will doubtless be interested in learning what Mr. Howell Wright, director of the Cleveland Hospital Council, has to say about the experience of the Cleveland hospitals with the Council's cooperative purchasing service. (See p. 22.) It will be well, however, for our readers to bear in mind that while cooperative purchasing may be sound in theory and has apparently been successfully applied in Cleveland for several years, it does not necessarily follow that it can be applied out of hand by any group of hospitals that may elect to try the experiment. Indeed, there are instances where its application has been a fiasco.

In considering the successful application of cooperative purchasing in Cleveland, one must bear in mind the ground work that was laid before the centralized purchasing bureau of the Council was ever even contemplated. The federation of Cleveland's welfare agencies was functioning long before its financial federation was organized. As a consequence, Cleveland's welfare agencies and institutions, including many of its hospitals, had been trained to think in terms of cooperative action. And yet, notwithstanding this long training, the Council experienced no end of difficulty in getting the hospitals to cooperate in the matter of purchasing equipment and supplies. Groups of hospitals contemplating a cooperative purchasing service will do well, therefore, to assure themselves in advance that all the members of the group have been trained through long experience in cooperative activities to think in terms of cooperative purchasing.

Another factor that has undoubtedly played an important role in Cleveland's experiment with a centralized purchasing bureau is the good fortune it has had in securing executives for the bureau which possessed not only buying ability but also a professional point of view and a vision of the needs and possibilities of the hospital field. Men possessing these qualities are rare. Therefore, it does not seem to be the part of wisdom to attempt an immediate general application of this theory to the hospital field; at any rate, not until there has been developed a sufficiently large group of skilled men possessing sound business judgment combined with a professional point of view.

Mr. Wright quotes the chairman of the purchasing committee of the Council as saying that branded articles are largely used to secure undue prices when, as a matter of fact, the essential features of the article can be duplicated in well

known bulk commodities at a fraction of the price. If, in making this statement, the chairman of the purchasing committee advises the hospital field no longer to recognize, for example, the significance of the names of well known, thoroughly reliable manufacturers on cans of ether, or to disregard the assurance of quality which the trade mark or manufacturer's name gives on various products, he in effect advises the ofttimes overworked superintendent to disregard his greatest source of protection in favor of making purchases on the strength of the talk of a glib salesman of the house which has no ideals of service and no standards of quality. In our judgment, this is especially dangerous and while there may be instances of unwarranted charges for branded articles, no reputable manufacturer can long continue to use his name on an inferior product which does not give a service equal to its sale price. Furthermore, the continuous betterment of hospital service is in part assured because of the incentive given manufacturers to make heavy investments of time and money in research and experimentation. These investments are justified because of the prestige and protection afforded in the past by the confidence hospital people have evidenced in worthy trade-marked products.

There are a number of other factors that militate against cooperative purchasing such as the inability of the individual institution fully to gratify its peculiar desire and a lack of flexibility in making purchases, but we have said enough to show our readers that the case for cooperative buying has not as yet been fully established.

TWO EXAMPLES OF CONSPICUOUS SERVICE

THE recent resignations of Mr. Albert M. Day and Mr. William J. Bryson as presidents of the boards of trustees of the Presbyterian Hospital and of St. Luke's Hospital, respectively, both of Chicago, focus attention upon two outstanding examples of conspicuous service in the hospital field.

Mr. Day became president of the board of trustees of the Presbyterian Hospital in 1904 at a time when the institution had only one fireproof building and was heavily in debt. During the twenty years Mr. Day was president of its board, the value of the Presbyterian Hospital property increased from $293,671 to $1,672,929. The hospital has been out of debt since 1907 and the endowment fund has grown from $200,000 in 1904 to $300,169,460.

Having retired from the firm of Councelman and Day, Mr. Day devoted the major part of his time to the affairs of the hospital. He had an office at the hospital and scarcely a day passed that did not find him at his desk, such was his devotion to the interests of the institution.

Mr. Bryson became a trustee of St. Luke's in 1903 and was elected president of its board in 1908, a position which he held until January 30, 1923.

Mr. Bryson brought to the hospital a warm personal interest and a generous support that reached every corner of the institution. Like Mr. Day, it was his habit to visit the hospital nearly every day when he was at home. For years Mr. Bryson urged the project of a new building for the hospital, funds for which are now being raised; but, fearing that the present state of his health and strength might not permit his seeing the venture through, he thought best to resign. He remains, however, as a trustee and honorary president, and still makes almost daily visits to the hospital.

WHEN A CHARITABLE INSTITUTION IS TAX-EXEMPT

THERE has been evidenced recently an increasing tendency to modify the blanket exemption of hospitals from certain ordinary liabilities, such as the liability for negligence or for taxation. Politically, this has been shown by the modification of the phraseology of exemption included in the statutory or constitutional exemption to cover those institutions receiving only a certain percentage of charity or free cases. This was introduced into the provision of New Jersey where a certain percentage of free cases is now required.

The judicial interpretations of this trend can be seen first in the attempt to define due care in the selection of servants inasmuch as the charitable institution is exempt from liability for the negligence of its servants if due care has been taken in their selection. The Flower Hospital case made this distinction.

In the field of tax exemptions, the situation is somewhat different. An investigation into the monetary value of the tax-exempt property in New York City alone a few years ago showed something like $40,000,000 exemptions. This is only an estimate, but, if indicative at all of the general situation, is worthy of careful consideration. There is quite a general agreement that the property of hospitals and other charitable institutions used for profit or revenue is not tax exempt.

A recent decision of the Texas Court of Appeals, quoted in this issue (page 61), goes much further in its analysis of the situation. This court de-

clares that an institution which is ostensibly charitable in character, since it receives some charity cases, but which makes a constant profit, because it is supported by a large interest-bearing sum granted by a corporation, is not in fact a charitable institution but is in reality a profit making concern, even though its profits are returned to increase the institution's capacity and improve its service.

This is not a criticism of the institution for its business-like and efficient operation; it is, however, a further distinction of what organization is. Tax exemptions are strictly construed, legally, and are waivers of very just and extensively enforced governmental obligations. If an exemption cannot clearly be conceded, if, in other words, there is any doubt as to the charitable nature and work of the institution, the presumption of exemption should be and is thrown against the institution. In other words, taxation is assumed unless exemption can be clearly shown.

A PRACTICAL ALLIANCE

IN THIS country, as in Great Britain, the establishment of mental wards in general hospitals has been agitated for years. The current number of *The Hospital and Health Review*, an English publication, brings word of the consummation of a practical alliance between the Middlesex Hospital of London, a large general hospital, and St. Luke's Hospital, a registered hospital for mental diseases. Under this association, two wards for male and female patients will be established in the Middlesex Hospital where early mental and functional nervous disorders will be treated by the medical staff of St. Luke's Hospital under the care of its trained nurses. A special out-patient clinic, moreover, will be organized to deal with borderline cases.

The inauguration of this cooperative scheme marks an important forward step in hospital service. As is well known, persons with early mental disorders are strongly averse to consulting specialists and being treated at a state or private hospital dealing only with this class of diseases. And yet these patients are the very ones that will receive the greatest benefit from early treatment of the right kind. They would not, however, object to attending a general hospital having the special facilities that will be at the command of Middlesex Hospital. By resorting to an institution of this type, they avoid the stigma still popularly connected, in no small degree, with psychopathic hospitals.

Those competent to judge feel confident that the results of this combination will justify the scheme. Hospital authorities in this country will do well to watch its development and, should it turn out successfully, act promptly in inaugurating similar alliances.

THE APPOINTMENT SYSTEM IN THE DISPENSARY

THE recent expansion in out-patient work, as measured by the greatly increased number of dispensaries in the United States, has been dwelt upon in current issues of THE MODERN HOSPITAL. A qualitative development of the dispensary in terms of improved service has also been noticeable, and is in no way better illustrated than by Dr. Dunham's article in this issue, describing the appointment system in the pediatric clinic of the Yale Medical School.

The old type of out-patient clinic in which a throng of patients passed rapidly before the doctor, with time for careful examination of only a few, if any; most of them receiving only a hasty questioning, a few kind words, and a prescription, is still prevalent in this country. The admission of patients by appointment seems an extremely simple and practical remedy for a large number of the current defects of dispensary service. As Dr. Dunham describes her clinic, it is apparent that order and organization are substituted for crowding and confusion.

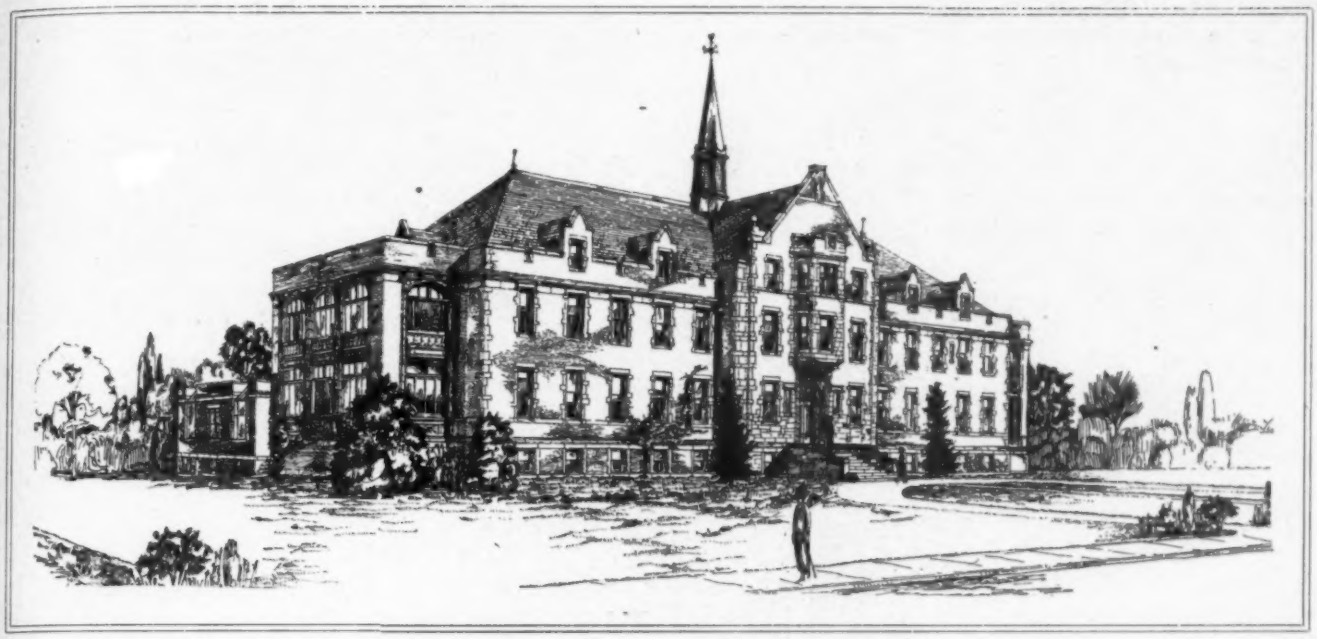
It is not a little interesting that convenience to the patient in saving time is only one of the many benefits claimed; diminishing of congestion, enabling work for a larger amount of patients to be done within the same space; improvement of medical service; increased opportunity for teaching and research; are all accomplished at a comparatively slight addition to expense.

The appointment system is now being tried not merely in a single department of an institution, as at Yale, but in all branches of two large institutions, at the Cornell Clinic and in the out-patient department of the Presbyterian Hospital, New York City; possibly elsewhere. Reports on these experiments, their cost, their value and their difficulties, will be of timely interest and should receive careful attention by administrators.

MORTALITY RATE INCREASE IN 1922

The mortality rate for 1922 was slightly higher than that for 1921 as shown by the figures compiled by the Bureau of Census of the Department of Commerce. The mortality rate for 1922 was 11.9 against a rate of 11.6 for 1921 for the thirty-three states shown. The state of Maine ranked highest in 1922 with a rate of 14.7 and Idaho lowest with a rate of 8.1.

The human race would be too unhappy if it were as common to commit atrocious things as to believe them.—Voltaire.



Although well designed, this plan of Harold J. Smith of Toronto, Ont., lacks compactness and is too ambitious to be operated economically.

LACK OF COMPACTNESS MAKES THIS WELL-PLANNED DESIGN EXTRAVAGANT

THE plans for which prizes and honorable mentions were awarded in THE MODERN HOSPITAL'S architectural contest for the plans of a small thirty to forty bed hospital were published in the May issue. For their educational value some sixteen other plans submitted in the contest have been selected for publication in succeeding issues. It is felt that the educational value of a study of these plans is greatly enhanced when accompanied by comments both critical and commendatory and various experts in hospital planning have therefore been invited to criticise the plans anonymously. For assistance, in preparing the comments subjoined to the four plans in this issue we are indebted to Mr. John R. Howard, Jr., Superintendent, New York Nursery and Child's Hospital; to Mr. W. C. Hill of Kendall, Taylor & Co., architects, Boston; and to Mr. G. W. Drach, architect, Cincinnati, Ohio.

THIS building is very well designed, but the whole scheme is too ambitious to be operated economically. The plan is not sufficiently compact to keep the cost of service down to a minimum. The buildings have a cubic capacity of 512,000 feet, more or less, for but thirty-two patients. It is a grave question if any community could afford to build such a large hospital to care for so few people. The author could well have added a story to the building either by making his ground floor a little higher and putting a basement under it for service and storage, or by making better use of the "attic" for operating purposes, thereby planning a hospital that not only could be built but operated more economically.

The building faces the west so that the main building will not shut off the sun from the low service and surgical building. It might, however, be better if this building faced south, especially as any future extension at the south end will shut off the sun from the main building.

The basement has excellent provision for the receiving entrance and room, ample storage rooms, and an unusually well lighted, airy, laundry.

There are excellent sleeping quarters for the male help in the basement, but there is a lack of locker space for other employees. The provision of several unassigned rooms is to be commended. It is unfortunate that the corridors, not only on the ground floor but on some of the upper floors, are closed. It is not a good plan to have but one boiler in a building as large as this even if it is large enough to do the necessary work. There should always be a spare boiler and an adequate opening to get it in and out. If the kitchen were somewhat more centrally located it would probably expedite the food service in the institution.

The wards, quiet rooms, and service stations are well planned, but instead of putting the male and female wards at one end of the corridor and the maternity and children's wards at the other, the female and maternity wards should be at one end and the male and children's at the other both for separation of the sexes and for elasticity in the service for women.

The operating-room suite is carefuly planned, especially the central position of the sterilizing room which might be still further improved by having doors opening into the two operating rooms. The anesthesia room could have been put nearer to the operating rooms. The placing of the delivery room in the operating-room suite is excellent, as

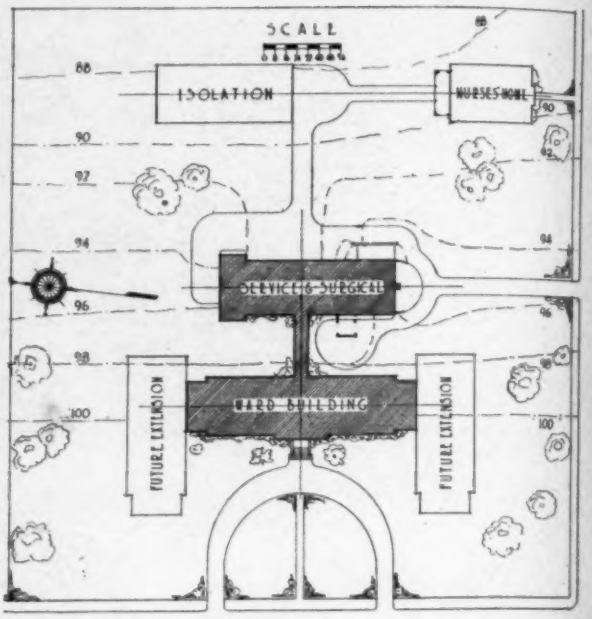
it provides more elasticity for both the maternity and the operating services. The nursery is much too far from the maternity ward.

The inside bathroom shows an ingenious use of space but would be better with windows and could probably be dispensed with. Instead of placing the bathtub against the wall, it should be so placed that the nurse can get around the tub in order to handle patients properly.

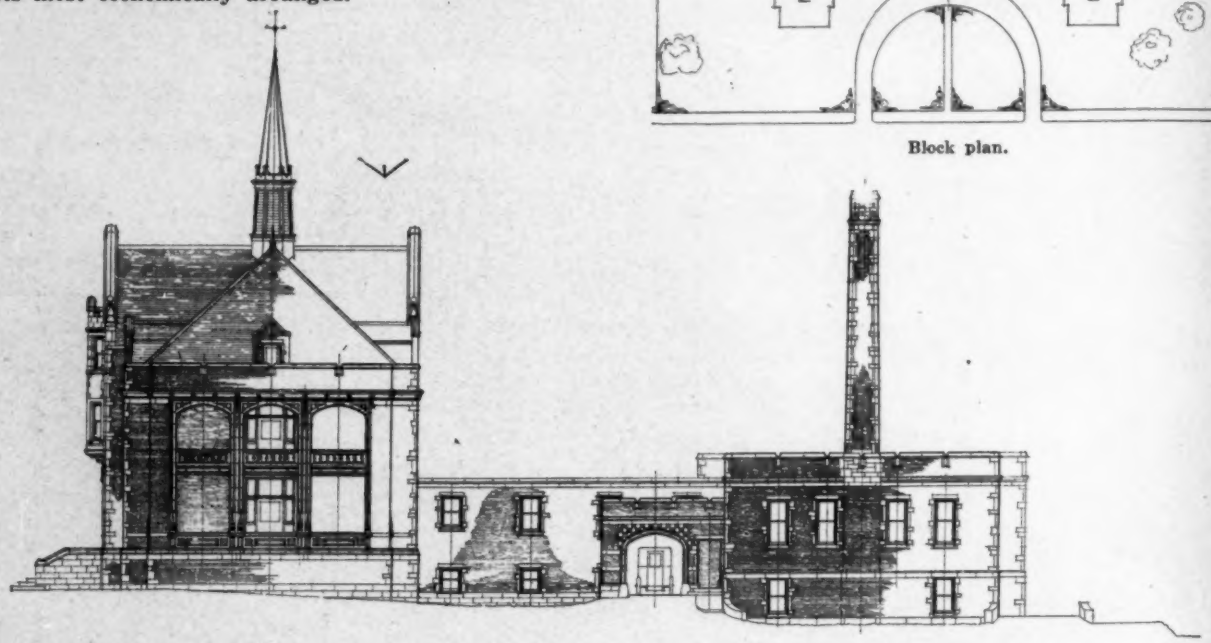
The placing of the nurses' station opposite the elevator is excellent.

Putting the living rooms for the superintendent and resident physician in the same corridor with the servants is not a feasible plan.

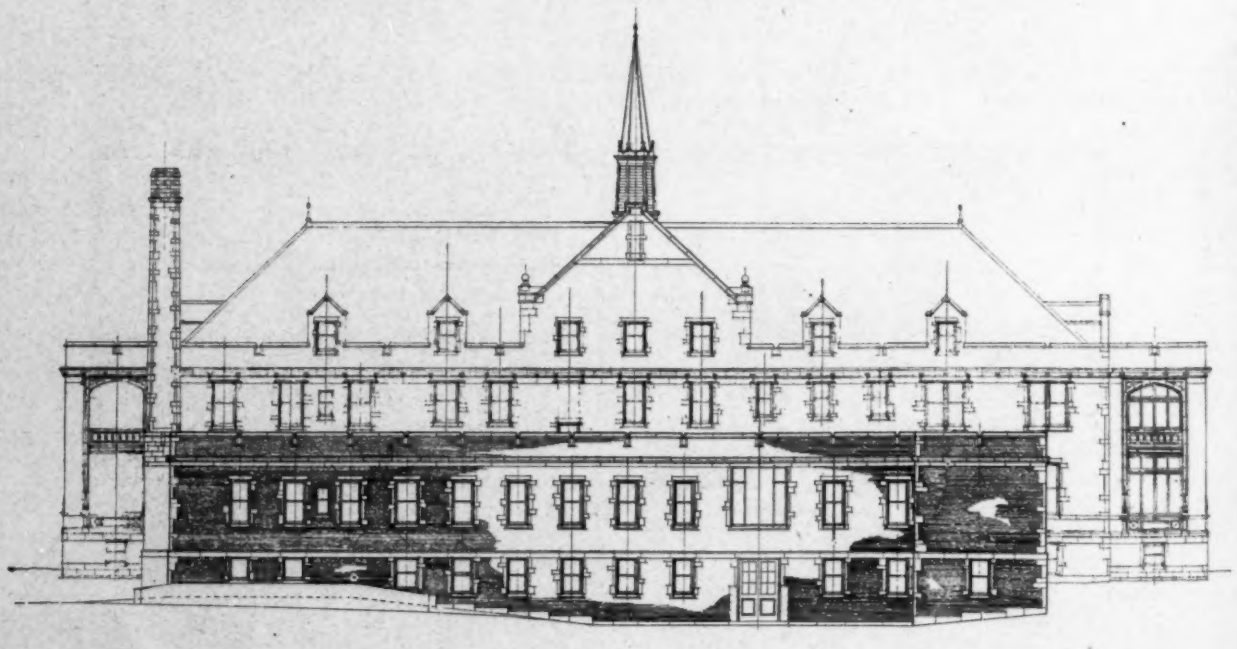
The placing of the service departments, the operating room, and the dispensary in a separate building is an excellent arrangement and, in spite of the two buildings, the nursing service is so planned as to provide only for two units most economically arranged.



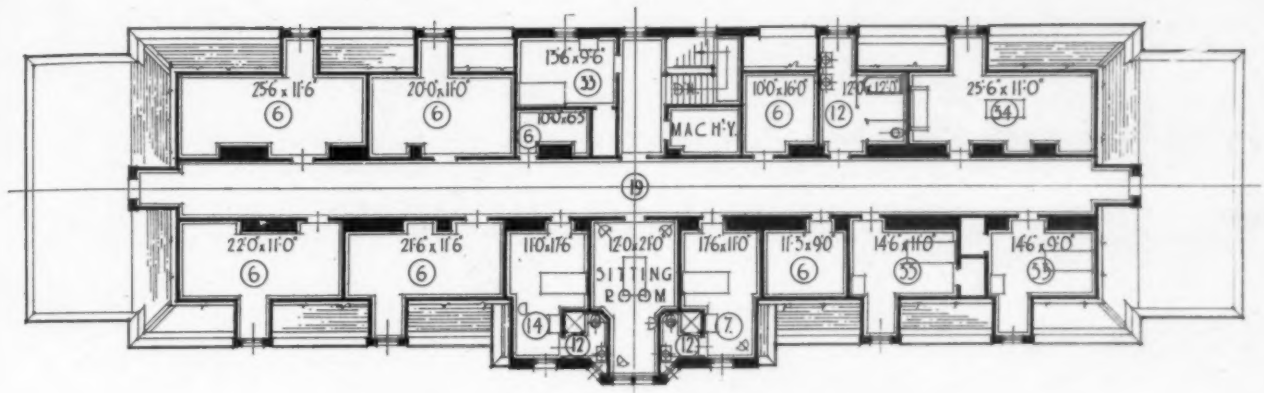
Block plan.



·SOUTH ELEVATION·

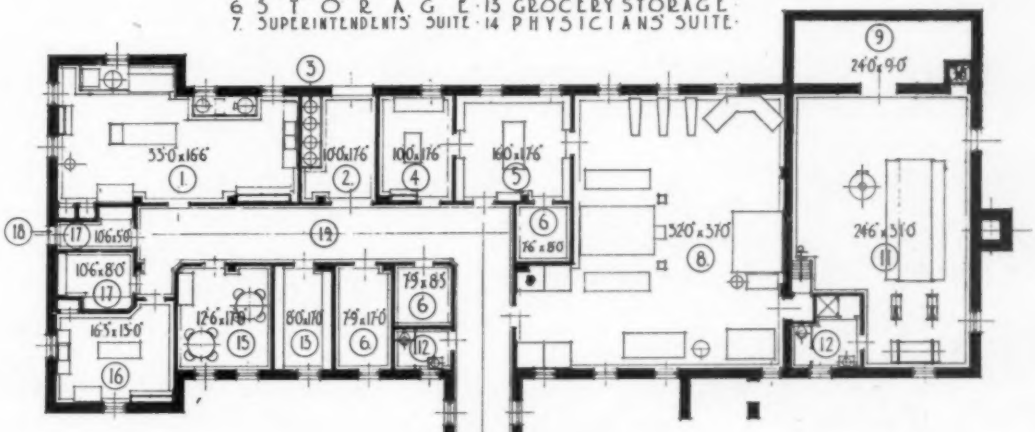


·EAST ELEVATION·



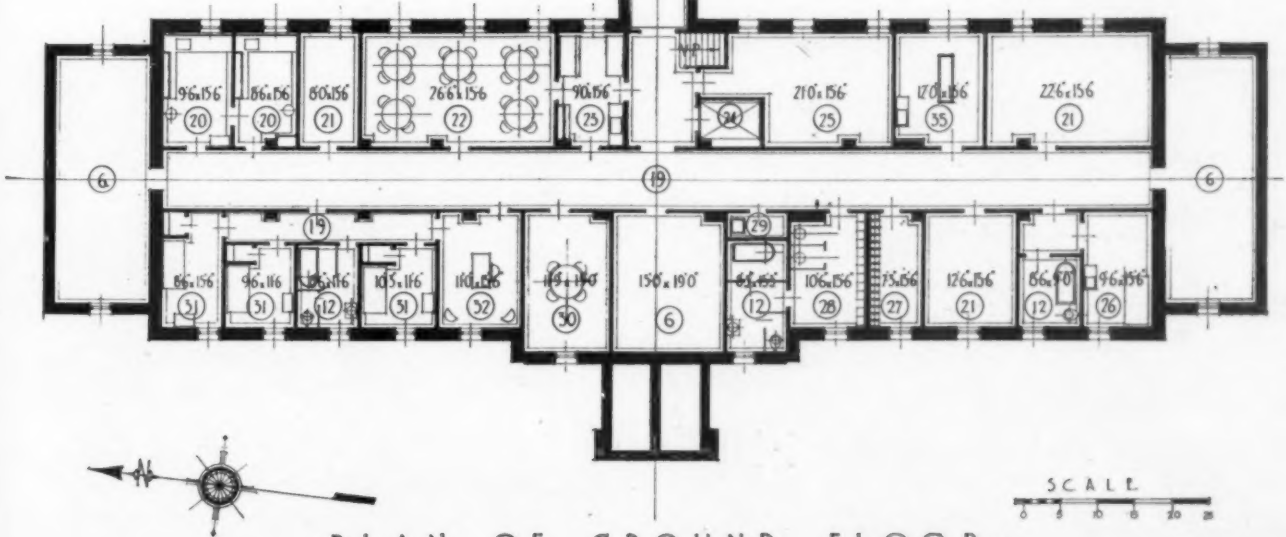
·PLAN OF ATTIC·

1 KITCHEN & LAUNDRY
2 RECEIVING ROOM
3 GARBAGE
4 SEWING ROOM
5 CLEAN LINEN
6 STORAGE
7 SUPERINTENDENTS' SUITE
9 COAL
10 ASH HOIST
11 BOILER ROOM
12 TOILET
13 GROCERY STORAGE
14 PHYSICIANS' SUITE

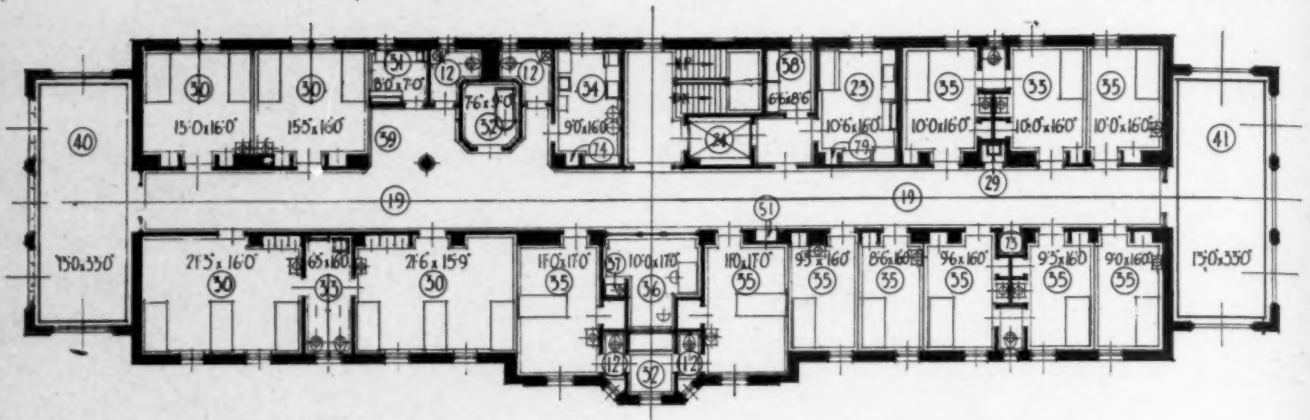


15 SERVANTS' DINING RM
16 DIET KITCHEN
17 COLD STORAGE RM
18 ICE DOOR (OVER)
19 CORRIDOR
20 LABORATORY
21 UNASSIGNED
22 NURSES' DINING RM
23 SERVERY
24 ELEVATOR

25 WORKSHOP
26 ISOLATION
27 PATIENTS' CLOTHES
28 NURSES' DRESSING ROOM
29 CLEANERS' CLOSET
30 STAFF DINING RM
31 MALE SERVANTS' RMS.
32 MALE SERVANTS' SITTING RM
33 FEMALE SERVANTS' ROOMS
34 FEMALE SERVANTS' SITTING RM
35 AUTOPSY

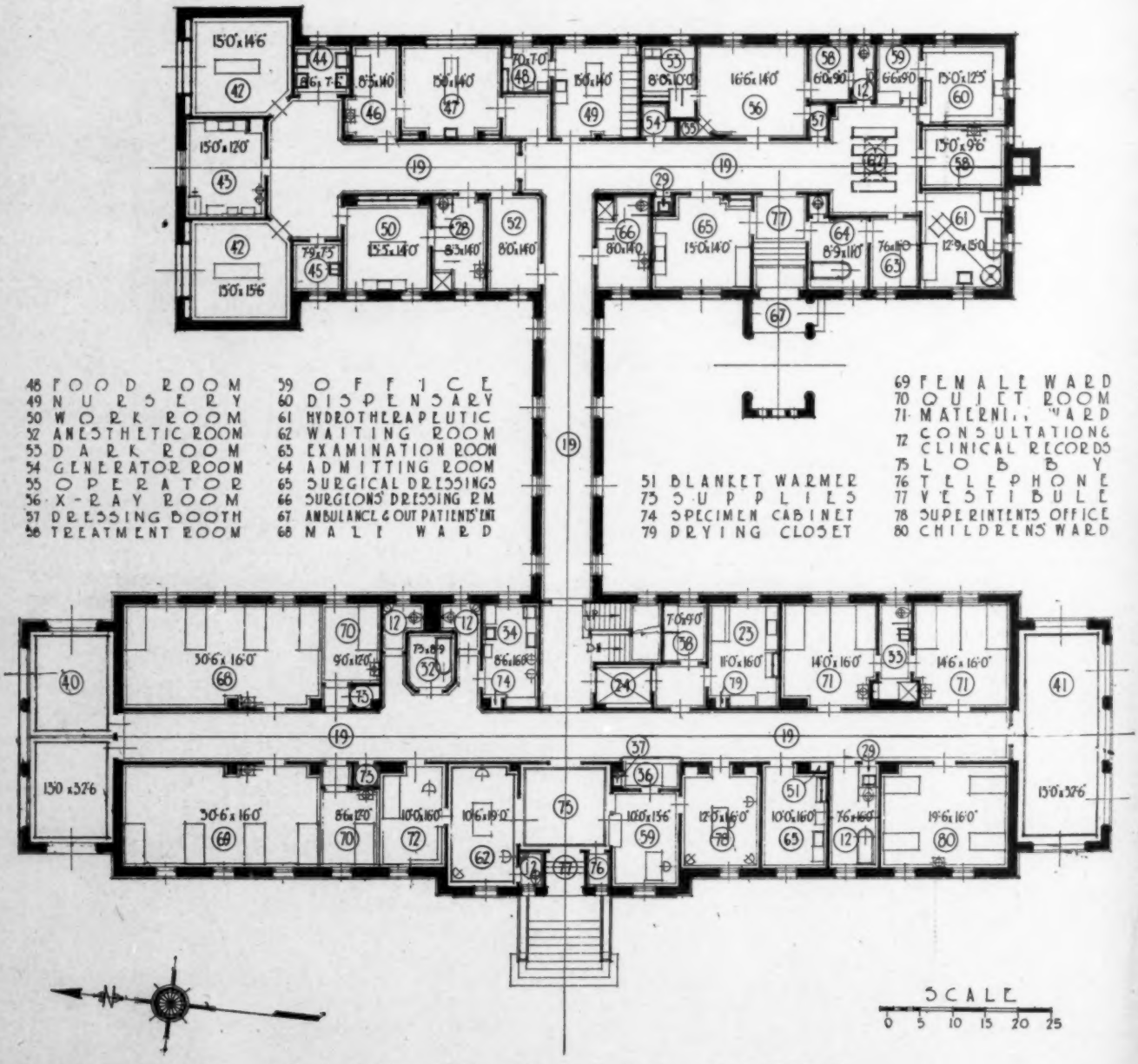


·PLAN OF GROUND FLOOR·



·PLAN OF SECOND FLOOR·

12 TOILET
19 CORRIDOR
23 SERVERY
24 ELEVATOR
28 NURSES' DRESSING ROOM
29 CLEANERS' CLOSET
30 SEMI PRIVATE WARD
31 SUPPLIES & FLOWERS
32 BATH
33 TOILET & PAN ROOM
34 UTILITY
35 PRIVATE ROOM
36 NURSES STATION
37 MEDICINE CLOSET
38 LINEN CLOSET
39 WHEEL CHAIRS
40 SOLARIUM
41 BALCONY
42 OPERATING ROOM
43 STERILIZING ROOM
44 SC-RUB-UP
45 ORDERLY
46 LABOUR ROOM
47 BIRTH ROOM



48 FOOD ROOM
49 NURSERY
50 WORK ROOM
52 ANESTHETIC ROOM
53 DARK ROOM
54 GENERATOR ROOM
55 OPERATOR
56 X-RAY ROOM
57 DRESSING BOOTH
58 TREATMENT ROOM
59 OFFICE
60 DISPENSARY
61 HYDROTHERAPEUTIC
62 WAITING ROOM
63 EXAMINATION ROOM
64 ADMITTING ROOM
65 SURGICAL DRESSINGS
66 SURGEONS' DRESSING RM.
67 AMBULANCE & OUT PATIENTS' ENT
68 MALE WARD
69 FEMALE WARD
70 QUIET ROOM
71 MATERNITY WARD
72 CONSULTATIONS
CLINICAL RECORDS
75 LOBBY
76 TELEPHONE
77 VESTIBULE
78 SUPERINTENTS OFFICE
80 CHILDRENS WARD
51 BLANKET WARMER
73 SUPPLIES
74 SPECIMEN CABINET
79 DRYING CLOSET

SCALE
0 5 10 15 20 25

·PLAN OF FIRST FLOOR·

The plan of E. M. Anderson and Juzaburo Ishii of New York City is compact and carefully planned as to arrangement, although a more pleasing effect would be gained by the addition of porches.

LACK OF PORCHES LENDS SEVERE NOTE TO THIS WELL-ARRANGED PLAN

THIS is, on the whole, a compact and well thought out plan. The design, however, is rather severe and would undoubtedly be improved if solaria or porches were added. The closeness of the building to the ground, which gives an inviting appearance, is accomplished at a sacrifice of light for the basement. The "T" plan of the building is excellent and the provision for extension, making an "H" out of the "T" is also good.

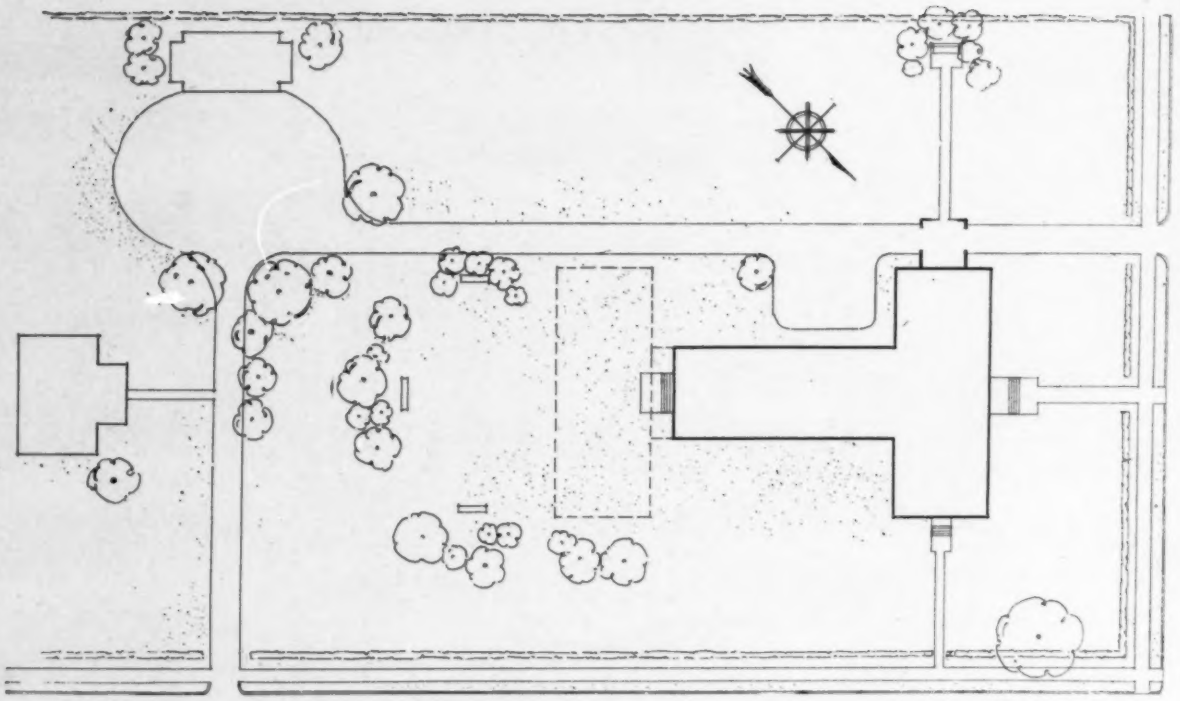
The basement is well planned except for an inconvenient crook in the corridor extending around the kitchen. The kitchen might better have been placed at the end of the building, thereby providing light and air on three sides. There is a good laundry, but it is too far away from the boiler room for economy in piping. There is excellent provision for the boiler room, machine room, cold space, and ash storage. This extra large space, however, is had at a sacrifice of other things, such as locker rooms needed in the basement. Placing the male and female help together in the basement is not practicable.

This plan shows a number of original features not called for in the specifications, including a chapel on the main floor. The main corridors are open at all four ends in such a way as to have excellent light and air. The rooms of the superintendent and resident physician are placed together. With a woman superintendent, this seems inadvisable. These suites, moreover, are directly over the laundry which is not a good place for sleeping rooms. The doctors' dining room is much larger than it need be, and there is no staff dining room so that it would seem better to cut this dining room in two to provide for both. Another novel feature in the maternity service on this floor is the provision for a nursing room which in practice would probably be used for a formula room. The nursery is near the maternity ward as it should be.

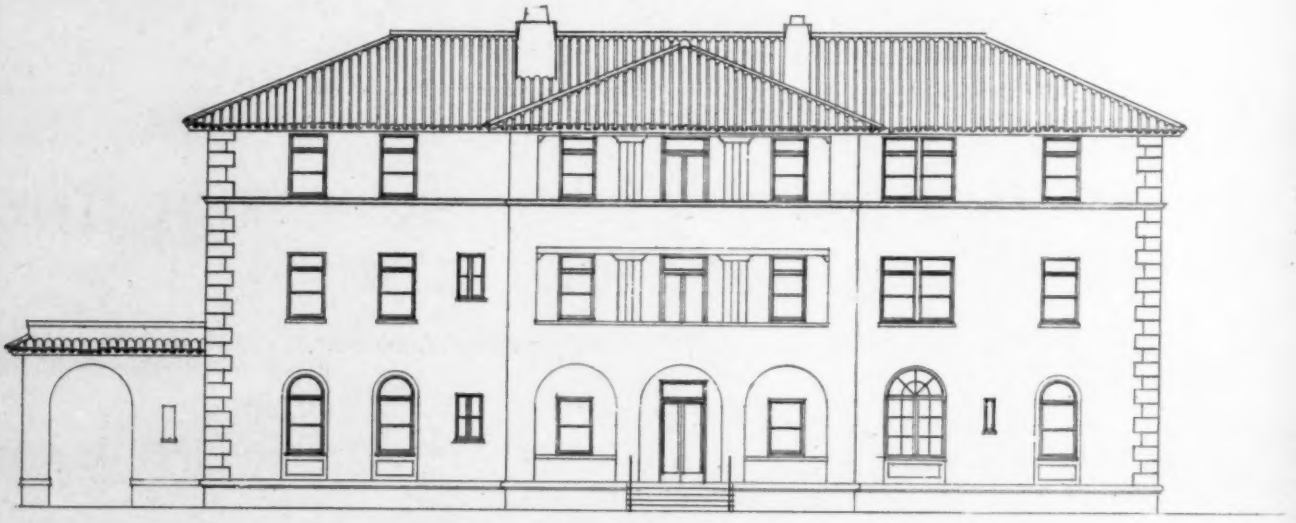
The second floor is admirably planned with the nurses' station commanding the entire floor. Another novel feature is an inside loggia running right across the base of the "T" and separating it from the main part of the building. It provides a piazza connected directly with the children's ward and another for the women's ward separaated by a foyer. The private rooms at the rear of the "T" on the second and third floors are well thought out and provide a good veranda for each floor.

The operating suite is strung out to cover too much space. The question as to whether it is best to take the dispensary patients to a ward floor for x-ray service or the hospital patients to the main floor depends on the kind and quality of the service rendered by the hospital. It is generally conceded, however that it is better to have the x-ray suite on the main floor of the hospital than on one of the ward floors.

The elevator and stair hall should be cut off from the front and rear wings on all floors by fire doors. It would be well, moreover, to have two staircases, for it is not good practice to construct a hospital with but one staircase, even if it is fire proof.



Plot plan.

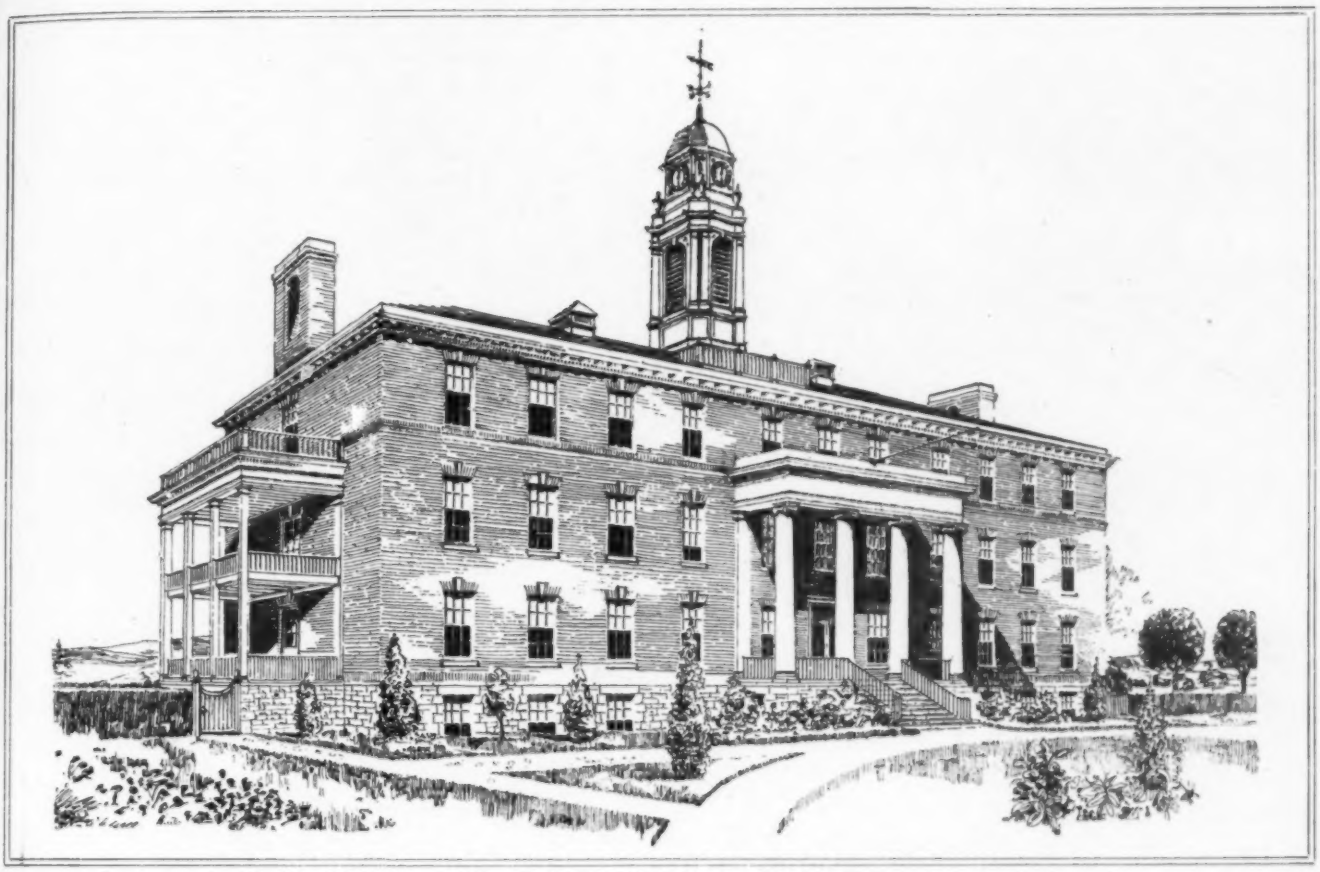


Rear elevation.

Side elevation.

MAIN-LOBBY 1
RECEPTION-ROOM 2
OFFICE 3
SUPTS-BED-ROOM 4
PHYSICIANS-BED-ROOM 5
CHAPEL 6
OFFICE 7
OUT-PATIENTS WAITG-RM 8
OUT-PATIENTS TREATMT-RM 9
ACCIDENT-WAITG-RM 10
ACCIDENT-TREATMT-RM 11
DOCTORS'-DINING-RM 12
PANTRIES-13 & 14
MATERNITY-ROOM 15
MATERNITY-ROOM 16
NURSERY 17
NURSING-ROOM 18
UTILITY-ROOM 19
VISITG-DOCTORS'OFFICE 20
LINEN 21
PANTRY 22
NURSES'-DINING ROOM 23
PORCH 24
FIRST-FLOOR-PLAN
1 LAUNDRY
2 SOILED-LINEN
3 CLEAN-LINEN
4 MORGUE
5 STORE-ROOM
6 MACHINE-ROOM
7 COAL-SPACE
8 ASH-STORAGE
9 BOILER-ROOM
10 ELEV-MACHINERY
11 PANTRY
12 DISH-WASHING
13 MENS'-TOILET
14 KITCHEN
15 COLD-ROOM
16 HELPS'-DINING-RM.
17 FEMALE-HELPS'-B-R.
18 FEMALE-HELPS'-B-R.
19 MALE-HELPS'-B-R.
20 MALE-HELPS'-B-R.
21 STORE-ROOM
22 GROCERIES
23 STORE-ROOM
BASEMENT-PLAN
0
20
SCALE

OPERATING RM 1
DOCTORS' DRESSG RM 2
NURSES WORK RM 3
ANESTHESIA RM 4
MINOR OPERATG RM 5
NURSES LOCKER RM 6
DRUG ROOM 7
CLINICAL LABORTORY 8
X-RAY ROOM 9
PLATE STORAGE RM 10
DARK ROOM 11
DRESSING ROOM 12
EQUIPMENT STORGE 13
BIRTH ROOM 14
STERILIZING ROOM 15
PRIVATE ROOMS 16-17
PANTRY 18
LINEN ROOM 19
PRIVATE RMS 20-21-22
SEMI PRIVATE RM 23
UTILITY ROOM 24
PRIVATE ROOM 25
SEMI PRIVATE RM 26
THIRD FLOOR PLAN
1 MEN'S WARD
2 UTILITY ROOM
3 RECOVERY ROOM
4 NURSES' STATION
5 LINEN ROOM
6 GRAD NURSES RM
7 RECOVERY ROOM
8 WOMEN'S WARD
9 STORE ROOM
10 PANTRY
11 CHILDREN'S WARD
12 CHILDREN'S PIAZZA
13 PRIVATE ROOM
14 PANTRY
15 LINEN ROOM
16-17-18 PRIVATE RMS
19 SEMI PRIVATE RM
20 UTILITY ROOM
21 PRIVATE ROOM
22 WARD PIAZZA
23 FOYER
24 PIAZZA
SECOND FLOOR PLAN
0
20
SCALE



The design by Leonard Dean of New York City is dignified and pleasing in appearance, although the tower is extravagant and does not add to its practical value. The plan offers a good arrangement for a well-lighted basement.

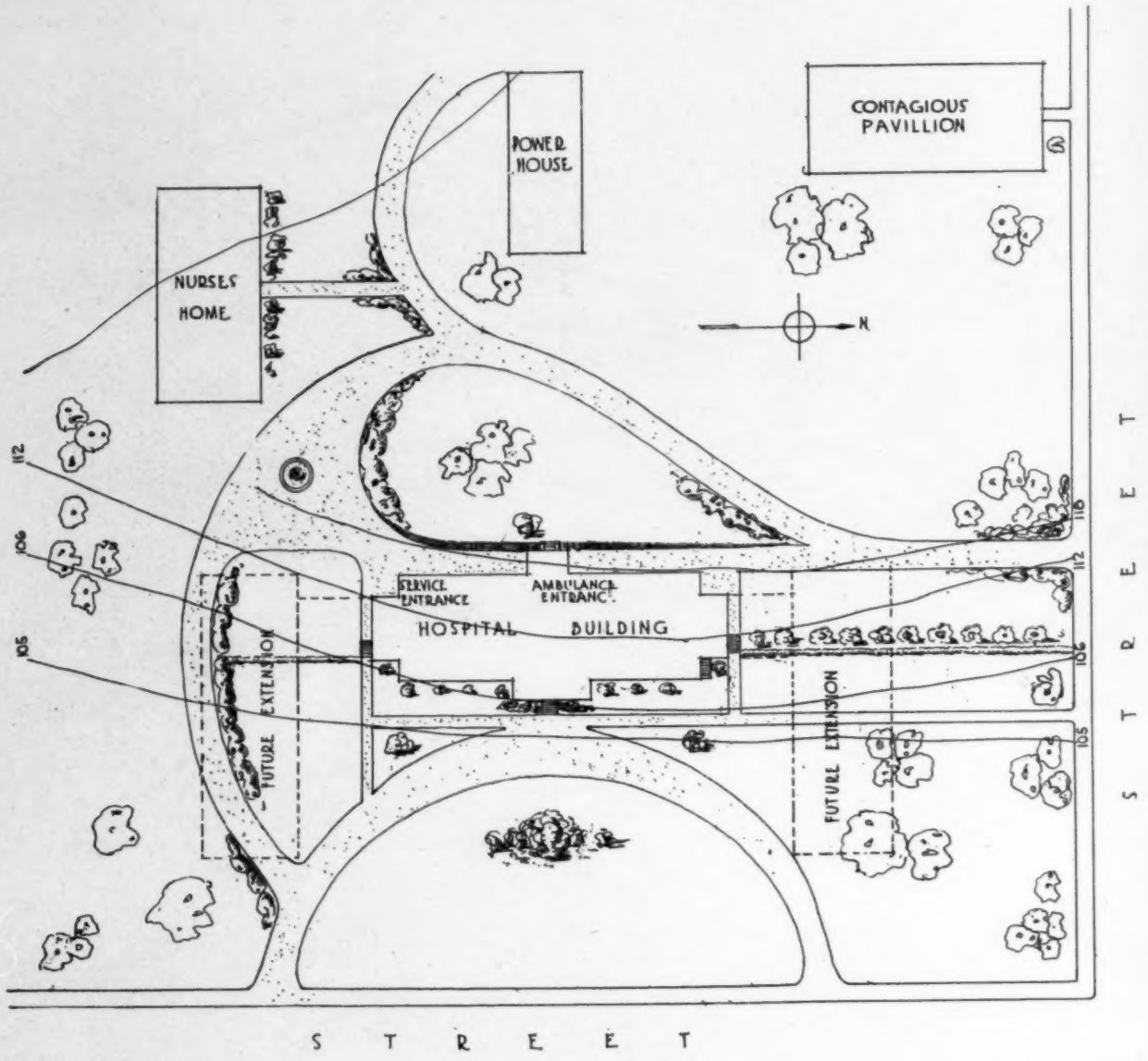
REMOVAL OF TOWER WOULD MAKE THIS DESIGN MORE PRACTICAL

THE design of this hospital is simple and dignified although the tower could well be eliminated, as it does not add particularly to the design and is of no practical value. Its elimination would save considerable expense in the cost of the building and the expense of its upkeep. If the veranda at the south end were designed as a solarium, it would materially help out the design as well as add to the practical value of the hospital. This solarium would be very useful not only as a solarium but as a day room for convalescent patients. The ground falls away so as to give an excellent and well lighted basement. Since the building faces east, the extension provided for on the south would shut off the sunlight.

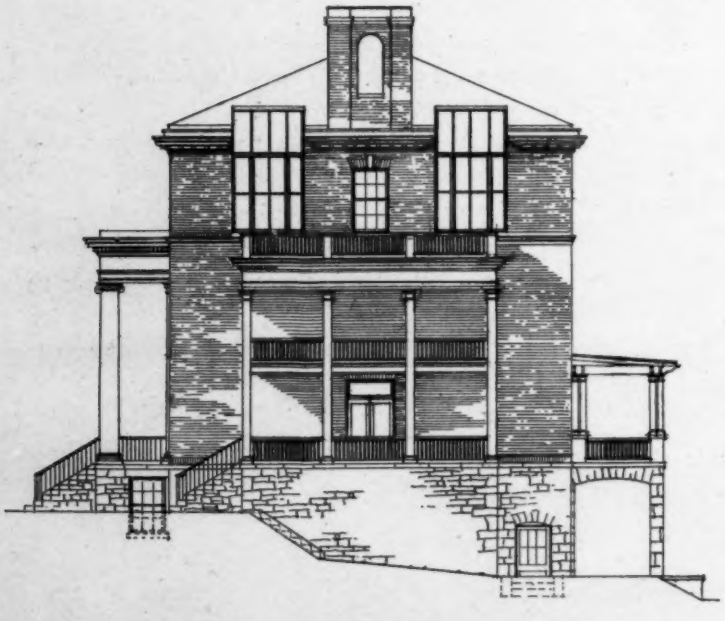
As the corridor in the basement is closed, ventilation would be difficult. The arrangement calls for the use of artificial light and mechanical ventilation. The laundry is well placed next to the boiler room. As there is no diet kitchen the main kitchen is rather small as is also the laundry. The locker rooms for men and women are well planned. The dispensary is well planned but should have a window into the record room. In as much as the drug room on the first floor is the only drug room in the hospital, it will have to be used for the hospital proper as well as for the out-patients' department. However, it is not so accessible to the hospital service as it should be. It is not a good plan to have the living suites of the superintendent and resident physician on the corridor with the dispensary. There seems to be no private office for the superintendent.

The nurses' stations are splendidly located; the semi-private service is also well planned.

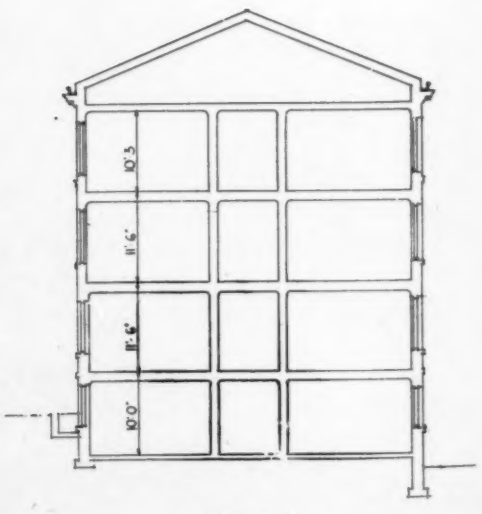
Placing the bathroom in the corridor with the maternity ward and nursery is not a good arrangement. It would be better to make the bathroom part of the operating suites so that it could be used for other purposes. The operating suite is well planned although it might perhaps be better to place the sterilizing room between the two operating rooms thereby making it somewhat more accessible to both. The utility room should be located near the wards, in order to reduce the number of steps taken by the nurses. There is the unusual and unnecessary condition of having none of the corner rooms with windows on two sides. There seems to be an inadequate amount of space for general storage, a regrettable mistake in the planning of many hospitals.



PLOT PLAN



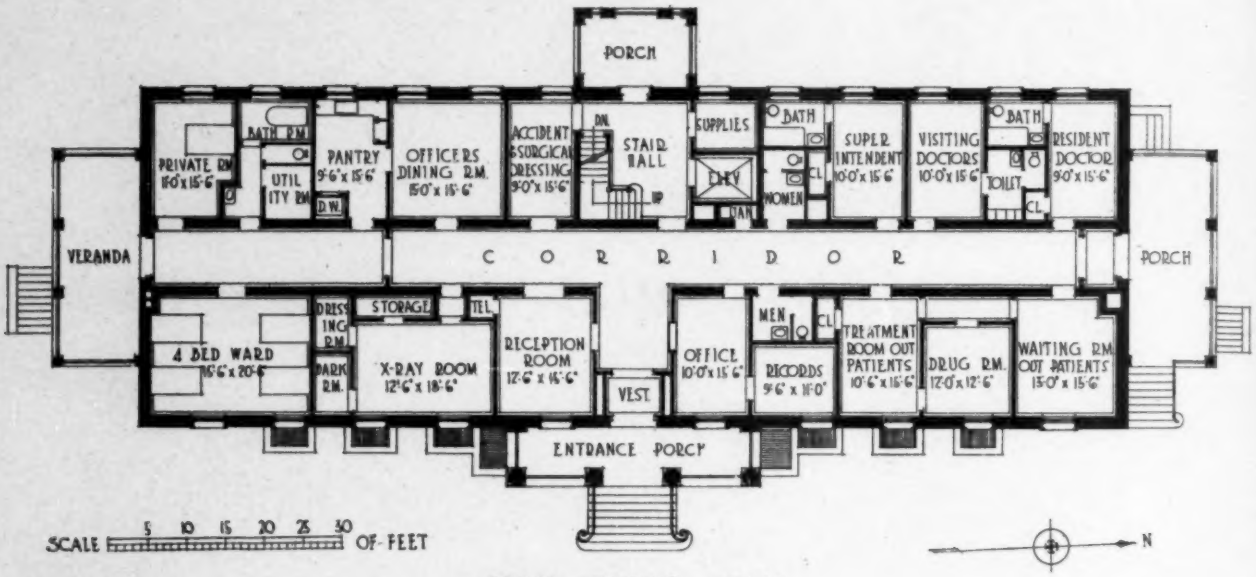
NORTH ELEVATION



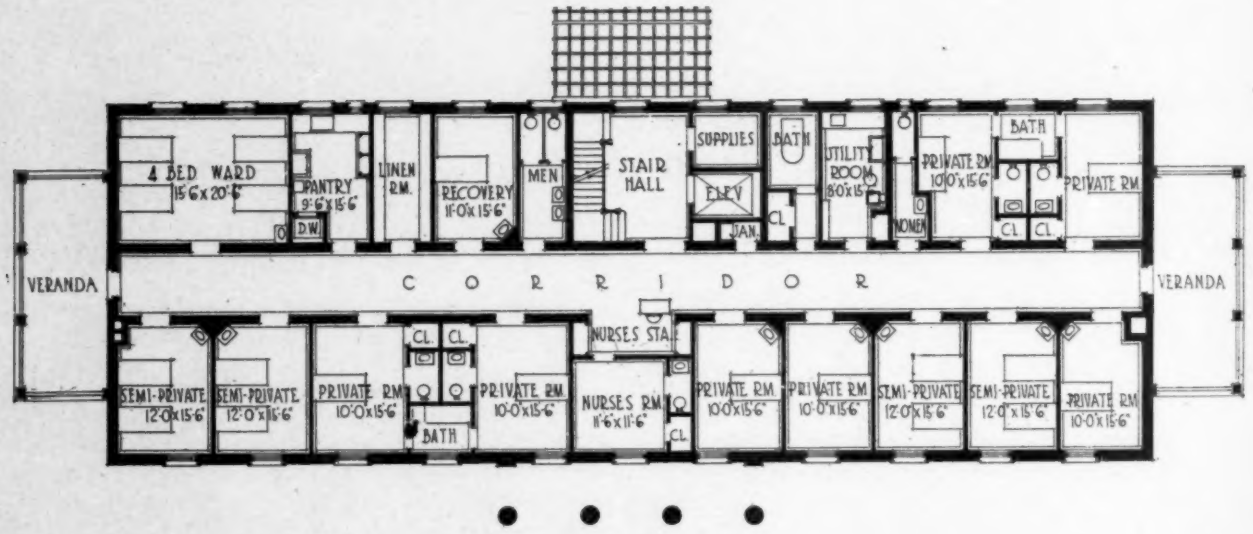
SECTION

WEST ELEVATION

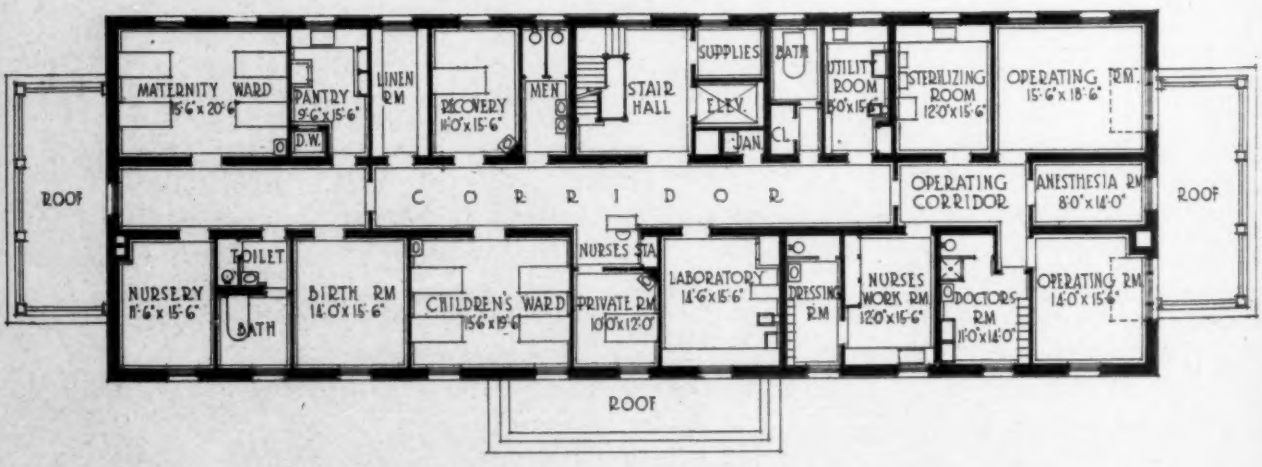
BASEMENT FLOOR PLAN



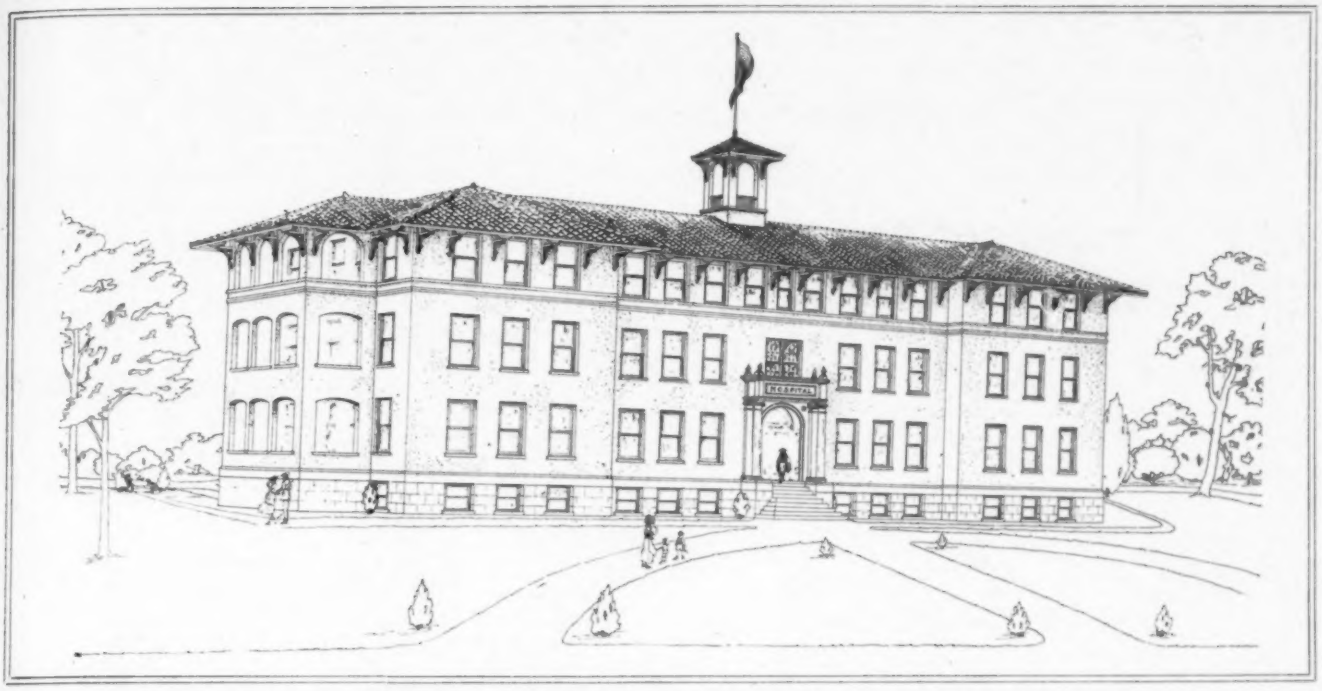
FIRST FLOOR PLAN



SECOND FLOOR PLAN



THIRD FLOOR PLAN



This design by H. L. Copeland of Walla Walla, Wash., is simple and practical, although its severeness of outline is relieved only by the tile roof.

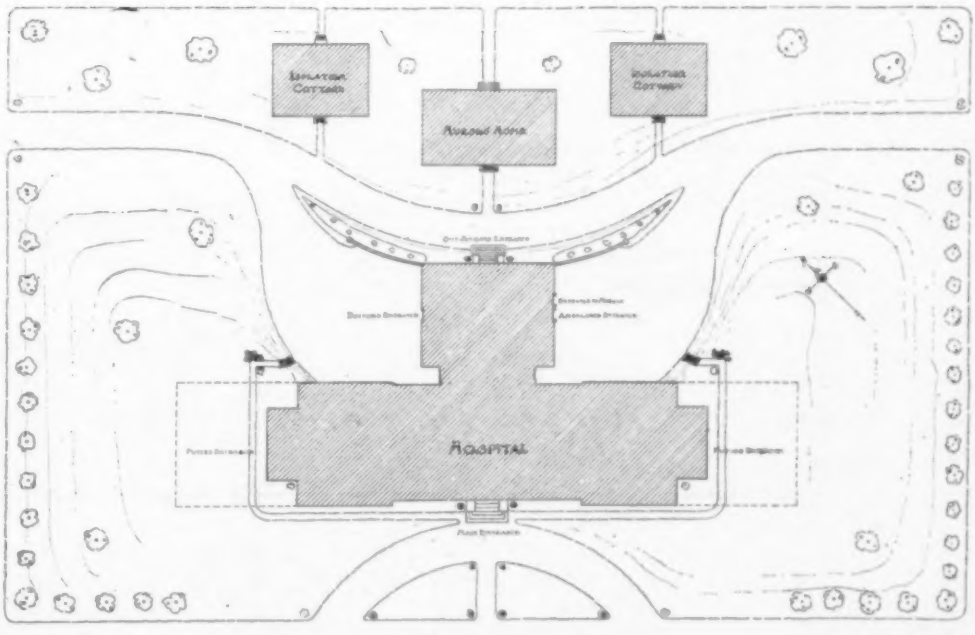
SIMPLE AND WELL-BALANCED THOUGH SEVERE IN DESIGN

THE design of this hospital is simple and well balanced but it has little to relieve its bare lines of wall and window except a tile roof. It would be improved if the lookout supporting the flag staff on the roof were removed. It has no practical value and adds nothing to the value of the design. The appearance of the building, moreover, is sacrificed somewhat by the raising of it in order to give excellent light and air in the basement. The provision for extension by lengthening the already long main section would stretch the building out too far for economy of operation.

The isolation cottages indicated on the block plan should be eliminated from consideration, or at least placed some distance from the nurses' home. There is a great deal of space lost in the corridors which are fully ten feet wide. The building has, moreover, but one staircase which is not enclosed from floor to floor to shut off noise and, in case of fire, smoke and flames. This omission warrants serious condemnation.

Considering the height of the basement, it is strange that the kitchen is tucked in a corner with only two windows and, in addition, is rather small and the boiler is only fourteen and one-half feet by seventeen feet. There should be two boilers in order that one may be held in reserve and ample room provided for getting them in and out. The basement halls are dark. There are four entrances at the rear of the basement which are far too many for proper control. A linen supply room has not been provided near the laundry, and there seems to be no receiving room. The nurses' and maids' dining rooms should be exchanged in order to bring the maids, instead of the nurses, next to the kitchen.

The placing of the pantry directly opposite the main entrance on the main floor is not good. The wards appear cut up in a way that serves no good purpose al-



Plot plan.

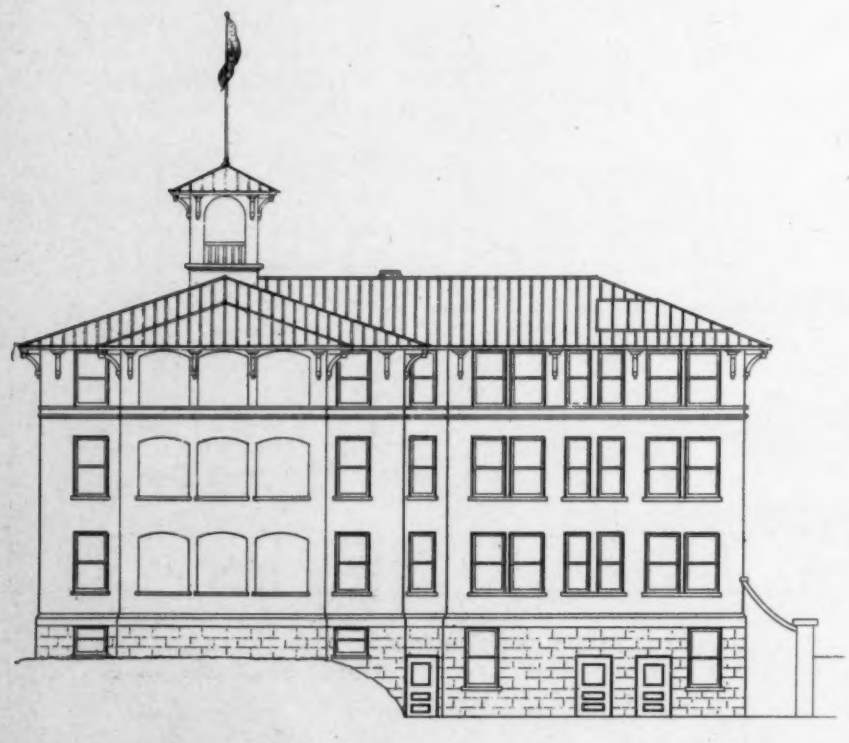
though they are well lighted, open, and have direct access to the porches. The entrance to the quiet room directly from the ward is objectionable. This room should be near the ward but outside of it. The utility rooms for the wards have no outside ventilation or light. This, of course, is objectionable. On each floor the wards are at the extreme end of the corridor with living quarters for various purposes intervening. This virtually necessitates seven nursing units in a hospital where the "T" shape would make three very simple. As in other plans published in this issue, the superintendent's and resident physician's quarters are practically adjacent. This is not good.

On the second floor, the nursery for born-in infants is next to the children's ward with a connecting door between. This arrangement, of course, is impossible. It is rather hard on the children to have the birth room across the hall from them.

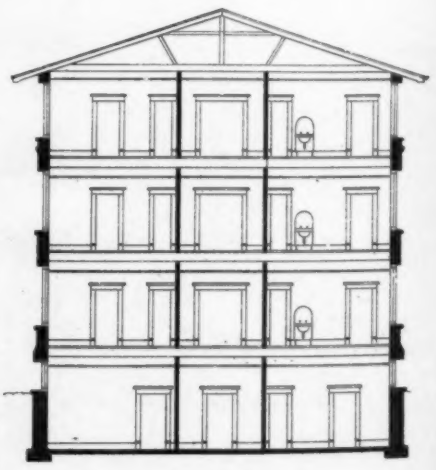
The provision of private and semi-private rooms on each of the three floors is excellent. The arrangement of the operating rooms is excellent, the only drawback being the absence of the birth room.

On the whole, the designer has grouped his problem very well and, with some revision and study, the plans could be condensed to a very good working hospital.

REAR ELEVATION



END ELEVATION

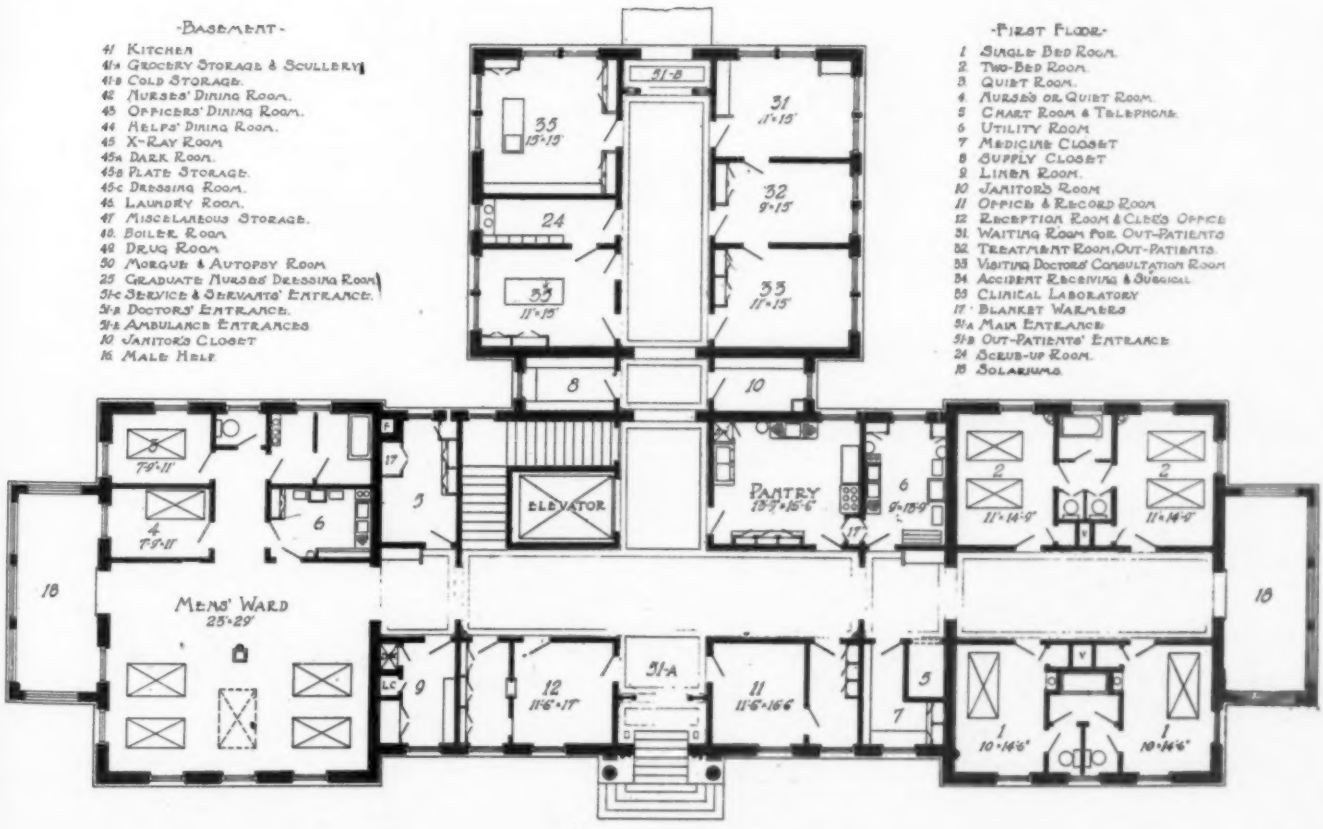


SECTION

BASEMENT.

-BASEMENT-

41 KITCHEN
41a GROCERY STORAGE & SCULLERY
41b COLD STORAGE.
42 NURSES' DINING ROOM.
43 OFFICERS' DINING ROOM.
44 HELPS' DINING ROOM.
45 X-RAY ROOM
45a DARK ROOM.
45b PLATE STORAGE.
45c DRESSING ROOM.
46 LAUNDRY ROOM.
47 MISCELLANEOUS STORAGE.
48 BOILER ROOM
49 DRUG ROOM
50 MORGUE & AUTOPSY ROOM
23 GRADUATE NURSES' DRESSING ROOM
31c SERVICE & SERVANTS' ENTRANCE.
31-B DOCTORS' ENTRANCE.
31-C AMBULANCE ENTRANCE
10 JANITOR'S CLOSET
16 MALE HELP



FIRST STORY.

-FIRST FLOOR-

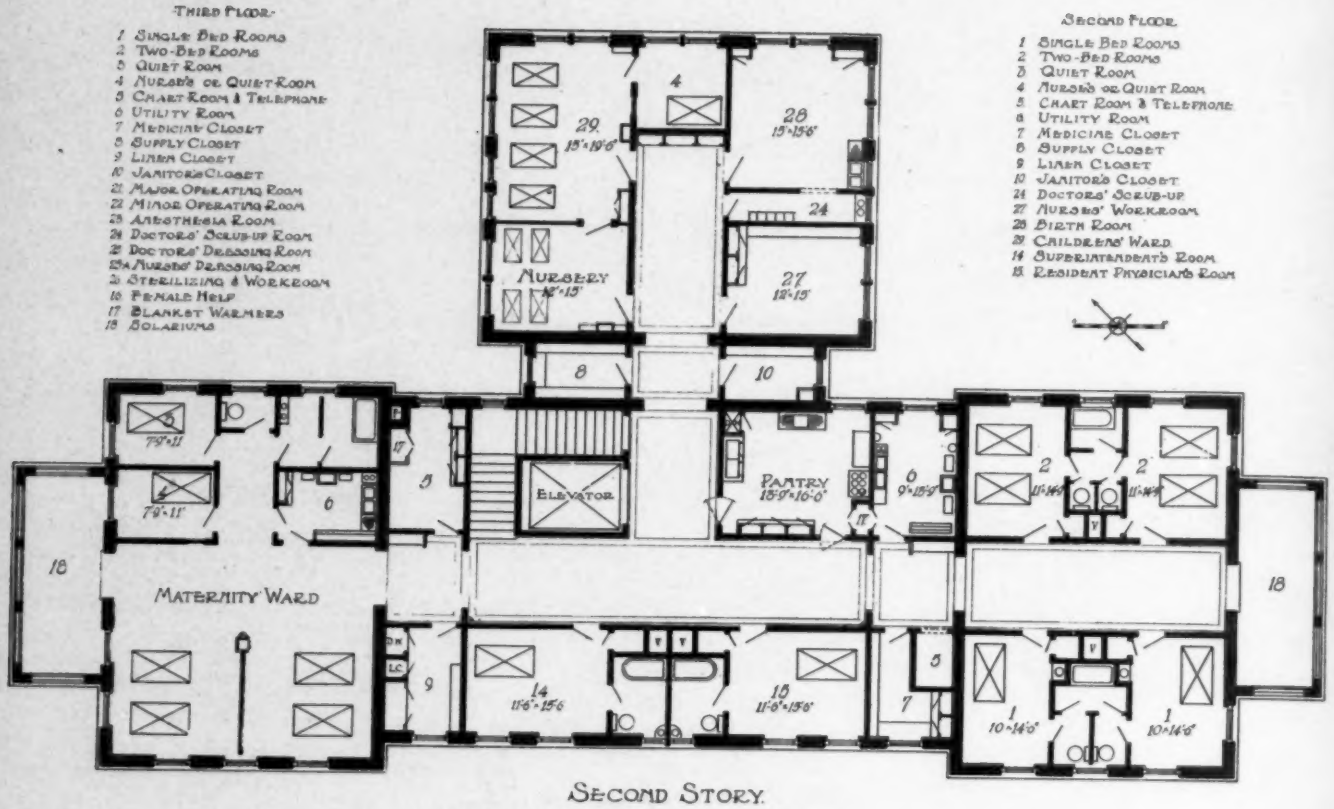
1 SINGLE BED ROOM.
2 TWO-BED ROOM.
3 QUIET ROOM.
4 NURSES OR QUIET ROOM.
5 CHART ROOM & TELEPHONE.
6 UTILITY ROOM
7 MEDICINE CLOSET
8 SUPPLY CLOSET
9 LINEN ROOM.
10 JANITOR'S ROOM
11 OFFICES & RECORD ROOM
12 RECEPTION ROOM & CLERK'S OFFICE
31 WAITING ROOM FOR OUT-PATIENTS
32 TREATMENT ROOM, OUT-PATIENTS.
33 VISITING DOCTORS' CONSULTATION ROOM
34 ACCIDENT RECEIVING & SURGICAL
35 CLINICAL LABORATORY
17 BLANKET WARMERS
31-A MAIN ENTRANCE
31-B OUT-PATIENTS' ENTRANCE
24 SCRUB-UP ROOM.
18 SOLARIUMS

THIRD FLOOR

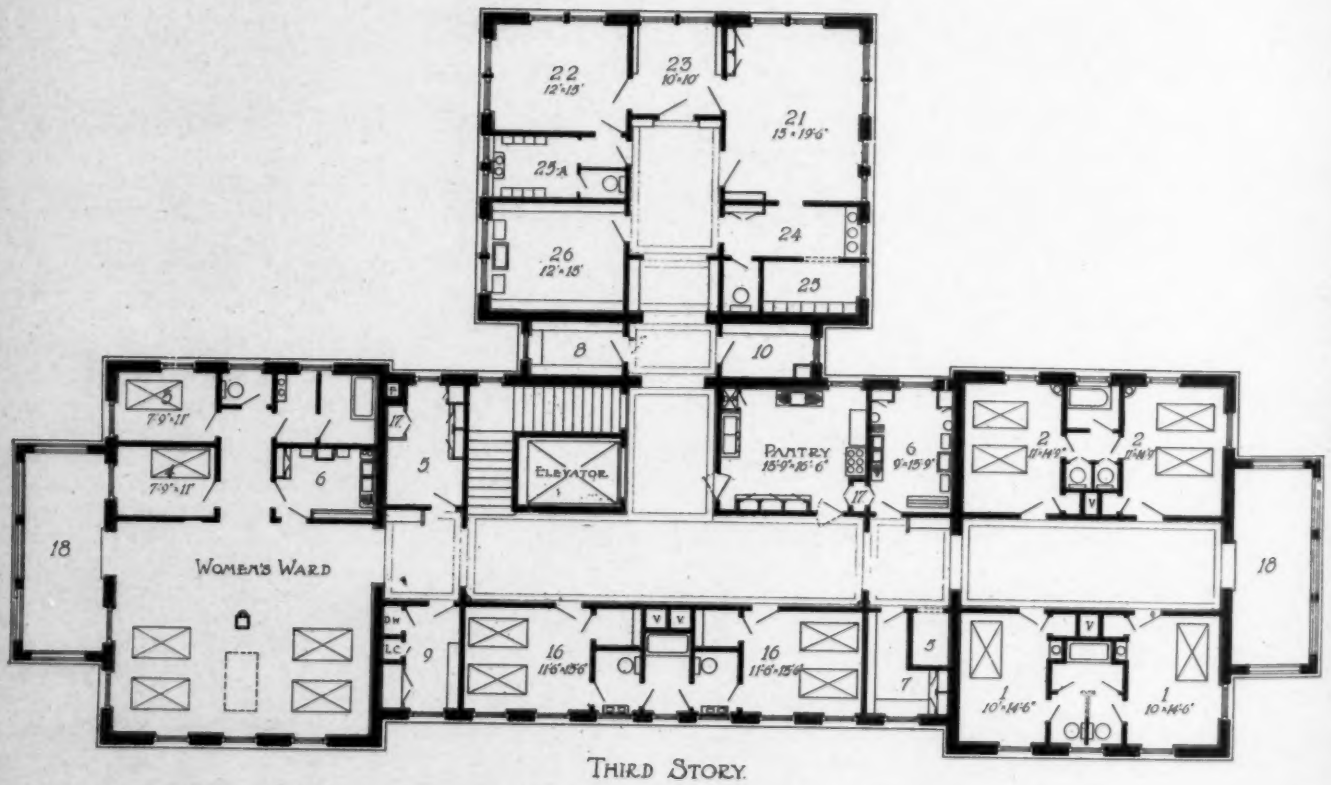
1 SINGLE BED ROOMS
2 TWO-BED ROOMS
3 QUIET ROOM
4 NURSE'S OR QUIET ROOM
5 CHART ROOM & TELEPHONE
6 UTILITY ROOM
7 MEDICINE CLOSET
8 SUPPLY CLOSET
9 LINEN CLOSET
10 JANITOR'S CLOSET
21 MAJOR OPERATING ROOM
22 MINOR OPERATING ROOM
23 ANESTHESIA ROOM
24 DOCTORS' SCRUB-UP ROOM
25 DOCTORS' DRESSING ROOM
25A NURSES' DRESSING ROOM
26 STERILIZING & WORKROOM
16 FEMALE HELP
17 BLANKET WARMERS
18 SOLARIUMS

SECOND FLOOR

1 SINGLE BED ROOMS
2 TWO-BED ROOMS
3 QUIET ROOM
4 NURSE'S OR QUIET ROOM
5 CHART ROOM & TELEPHONE
6 UTILITY ROOM
7 MEDICINE CLOSET
8 SUPPLY CLOSET
9 LINEN CLOSET
10 JANITOR'S CLOSET
24 DOCTORS' SCRUB-UP
27 NURSES' WORKROOM
28 BIRTH ROOM
29 CHILDREN'S WARD
14 SUPERINTENDENT'S ROOM
15 RESIDENT PHYSICIAN'S ROOM



SECOND STORY.



THIRD STORY.

AN APPRECIATION OF ARTHUR B. ANCKER, M. D.

DR. ARTHUR B. ANCKER, who for forty years was superintendent of the City and County Hospital, St. Paul, Minn., died suddenly in his office Tuesday afternoon, May 15. Although he has not been in robust health for several months, Dr. Ancker was still energetic at his work and died "in the harness" in the manner he had often wished that death would come to him. He was he was stricken with faintness and died half an hour later, visiting patients who had just arrived at his office when remaining conscious until a few minutes before his death.

Dr. Ancker—A Leader of National Fame

Dr. Ancker was so well known to the American Hospital Association of which he was at one time president, to the American Medical Association, and to other national organizations of which he was a faithful member, that readers of THE MODERN HOSPITAL are acquainted somewhat with the personality which made Dr. Ancker beloved by all who knew him.

Dr. Ancker was born in Baltimore, March 20, 1851 and lived in that city throughout his youth. His early inclinations were toward a sea-faring career, but he was persuaded to forego the maritime life to study medicine in the Medical College of Ohio which has since passed out of existence. After taking his degree there in 1882, he went directly to St. Paul, the city to which he devoted his life work. After one year of general practice, Dr. Ancker was chosen superintendent of the City and County Hospital which had just been reorganized.

Dr. Arthur B. Ancker

This hospital as it now stands, an institution having a physical valuation of more than $2,500,000, stands as a great achievement of Dr. Ancker, although he was little disposed ever to take credit for this accomplishment. He was fond of noting the steps in the development of this institution. He delighted in describing the conditions as he found them when he first took charge of the hospital in 1883. The first building was a ten room house with a barn which served as a very practical adjunct in the way of an isolation annex and morgue. He used to recall, in vivid pictures, the twenty-seven stoves, the scores of kerosene lamps and the old well outside, all of which constituted the hospital's physical equipment.

A screen thrown across one end of the largest room served to shelter the view of the patients whose condition was such that they might suffer from seeing surgical operations; stronger patients were not afforded this special attention. The women who scrubbed the floors prepared the food and served it to the patients. Dr. Ancker was the only physician and thus performed all the surgical operations himself. One of the first steps taken by Dr. Ancker in the way of building up the elaborate institution of today was the erection of a windmill over the cistern to pump the water into the building.

From these rude beginnings, the hospital grew under the able direction of Dr. Ancker until it is now a model of modern facilities, having an 800-bed capacity, 166 nurses, and housing more than 1,100 patients and employees every night. The records show that Dr. Ancker treated over 137,000 patients during his forty years there. He was never without a plan for the improvement of the hospital and left nothing undone in the way of increasing its services for the public benefit. He was deeply interested in the progress of the dispensary at the hospital which began operation in January of this year. His hope when he died was that the institution might soon have new quarters for communicable diseases, as the present ward accommodations are very inadequate.

Although Dr. Ancker devoted the greatest part of his time to the City and County Hospital, he did not restrict his activity or his interests solely to that project. In addition to keeping in touch with the several medical and hospital organizations to which he belonged, and to the deliberations of which he always contributed something of value, he won wide recognition as an authority on hospital architecture. He was so deeply interested in hospital construction that his library viewed from one corner might lead the observer to believe that he was an architect. Nor were his interests confined to aspects of his profession. He had an intellectual curiosity and vivacity that kept him in the currents of the world's thought. He enjoyed reading and had at his command the choicest literature, always considering the nobilities of art and literature as as sacred heritage.

In his hours of recreation, his friends were conscious of his rich vein of humor and his vast capacity for fun in his quiet, twinkling way. They recognized also that great as he was in professional capacity and organizing power, his greatness lay in his character and personality, and that the secret of his achievement was his genuine human sympathy. His loyalty was ever self-sacrificing and his devotion to his friends was unswerving. His greatest happiness was found in serving others.

In Dr. Ancker, there were combined the qualities of a physician and surgeon and the genius of administrator and organizer. Although he was very interested in administrative affairs during the past few years, he never failed of keeping the physician's interest in all those who came to the institution for care. He aimed to see, speak with and examine, if possible, every patient who came to the hospital.

The esteem in which Dr. Ancker was held by all those with whom he came in contact is ably expressed in a paragraph from the tribute paid to him by the Board of Control of the City of St. Paul.

"No man ever gave his life more completely to one definite task than did Dr. Ancker. The hospital was Dr. Ancker and Dr. Ancker was the hospital. In the en-

thusiasm and vigor of his young manhood he adopted it, as it were, and for over forty years he built it, watched it, tended it, loved it, toiled for it, prayed over it, dreamed about it, and died with it imbedded in the very fibres of his being. In the truest sense, no other hand than his had a part in the making of this great institution. It will forever be his great monument. He was the rarest of human combinations, an executive and a dreamer in one; his splendid idealism was never made futile by its lack of sound common sense; and his remarkable efficiency was not deadened by any lack of human-ness and vision. Day by day he did his work faithfully and step by step he carried out his profound plans for the institution he was building. . . .

"This board knew him in all his phases; admired him as a worker, trusted him as a counsellor, respected him as an associate, enjoyed him as a comrade and loved him as a man. So real and vital was his living that we cannot think of him as gone, but will forever be conscious of his abiding presence, and the inspiration of his strong and sustaining fellowship."

Dr. Ancker's death not only affected his family, friends, the people with whom he worked in St. Paul, but his loss is felt by the organizations to which he belonged and the people throughout the country who directly or indirectly have felt his influence. His loss is particularly felt in hospital work, for he was not only an outstanding figure in his profession but was one of the greatest hospital men in the country.

HOSPITALS AND DISPENSARIES CENSUS FINISHED DURING JUNE

The latest returns for hospitals, checked to May 29, give a total of 3,892 schedules received—a gain of 465 since the last report made on April 26. There are still 1,986 hospital schedules to come, which number, however, is 512 less than that out on April 26, when the last report was made.

For dispensaries, likewise, the latest returns to May 29 show a total of 1,501 schedules received—a gain of 138 since the last report. The number of dispensaries for which returns are lacking is 853 as compared with 721 on April 26, this increase being due to the addition recently of a large number of new dispensaries, including dispensaries and clinics reported on the hospital schedule (in answer to question 18) and those reported by health organizations and by bureau agents.

These figures show that to date nearly two-thirds of the hospital and dispensary schedules have been received, and it is hoped that the remainder will be received before the end of June, after which the census must be closed. The Bureau of the Census has just sent out another request and those hospitals and dispensaries which have not yet responded should make it their immediate business to fill out and mail their schedules. This will enable the bureau to begin to compile the statistics and to give out without great delay, thereafter, some preliminary figures regarding the hospitals and dispensaries of the country.

POISONOUS GAS TEST SIMPLIFIED BY NEW DISCOVERY

Through investigations conducted by government technologists, methods of detecting carbon monoxide, the most insidious and deadly of poisonous gases, have been greatly simplified. Secretary of the Interior, Work, has recently made a public announcement to this effect informing 700 industrial physicians and surgeons throughout the country of this new discovery.

For some time, the Bureau of Mines of the Interior Department has been conducting research work with the result that means have been found by which it is possible to discover within three minutes the extent that a person has been affected by carbon monoxid gas through the extent of poison saturation in the blood. Formerly it took approximately from twenty-four to forty-eight hours before diagnosis could be made of such cases either in hospitals or well-equipped laboratories with the services of a skilled organic chemist. The test is effected through a simple and inexpensive instrument which may be carried in the pocket and which requires no special training for its operation.

Many lives are expected to be saved by the general adoption of this mode of finding gas poisoning, particularly in the mining industry as well as other fields where dreaded gases are a menace. With this quick method of diagnosing, it is possible to institute promptly the proper emergency treatment.

Carbon monoxid is the universal industrial poison gas and manifests itself in mine explosions and fires, combustion of explosives in the atmosphere around coke ovens, coal gas, water gas, and producer-gas plants as well as in the exhaust gases of automobile engines, improperly constructed and operated kitchen gas ranges, and in smoke from burning buildings.

Because of possible exposure to its deadly influence of citizens in all walks of life the new instrument for detecting it in the blood is expected to be in universal use among the physicians within the near future. Symptoms of carbon monoxid poisoning consist of headache, dizziness, weakness in the legs, increased respiration at first which becomes irregular and depressed finally resulting in collapse, unconsciousness, and possibly death.

CATHOLIC HOSPITAL ASSOCIATION IN SESSIONS OF EIGHTH ANNUAL MEETING

Seven groups and nine conferences are included in the program of the eighth annual convention of the Catholic Hospital Association now in session at Spring Bank, Wisconsin. The group conferences began June 19 with the Mothers' General session and will end August 9, with the nurses' session.

The second group conference, a special meeting of superintendents of nurses' schools and supervisors of floors and all concerned with the instruction and supervision of nursing education, both laymen and sisters, was held June 26, 27, and 28.

Group conference three for supervisors of operating rooms, dressing rooms, and anaesthetists, supervisors, of obstetrical and pediatrical service, laboratory and x-ray technicians, blood chemistry and metabolism technicians, dietitians and kitchen supervisors will be held July 10-12 and division two from July 17-19.

Group conference four, a session for pharmacists, record keepers, follow-up clerks, dispensary and social service workers, physiotherapists, occupational therapists will be held from July 24-26 and from July 31-August 2.

Sister nurses, lay nurses, directors of alumnae associations, heads of nurses' guilds, moderators of nurses' retreats, nurses' sodalities, etc., will be held August 7-9. Many papers of special interest to the nursing profession will be read at this group conference. Group conference six to be held August 14-16 will be given over to doctor delegates from organized staffs.

State directors, diocesan directors and chaplains, spiritual directors of hospital sisterhoods, and other interested clergy will meet in group conference seven August 21-23.

COURT DETERMINES STATUS OF CHARITABLE INSTITUTIONS

Status of Charitable Institution Defined

The City of San Antonio, Texas, brought suit against the Santa Rosa Infirmary to recover city and school taxes assessed against certain real property and improvements. The defendant sought to defeat the tax on the ground that the property was exempt.

The Infirmary was organized in 1918 for benevolent and charitable purposes "especially for the acquisition of, or erection of and maintenance of a hospital at which members—will administer to the sick, the infirm, the helpless, the maimed and afflicted of all creeds, colors, and nationalities," excluding mental or contagious disorders. The corporation was to endure for fifty years, had no capital stock, but held certain property necessary to its purposes. The corporation used its buildings for four purposes: 1, General hospital purposes; 2, the operation of a drug store; 3, the conduct of a training school for nurses; 4, the housing of "St. Luke's Clinic" which maintained office quarters, a waiting room, and had the exclusive use of six beds in the infirmary building. This clinic, being a separate organization, paid a rental fee of $500 per year. Salaries are paid to certain staff members, and graduate nurses engaged in caring for patients are paid by the patients themselves.

The Infirmary admits every one, giving such treatment as is necessary. Those who are able to pay do pay certain rates. Evidence as to income and expenditure was produced, and it was shown that in three years there was a net profit of $125,000. These profits were placed in a building fund for additional equipment and buildings.

The statute exempting such property from taxation reads, "all buildings belonging to institutions of purely public charity, together with lands belonging to and occupied by such institutions not leased or otherwise used with a view to profit unless such rents and profits and all moneys and credits are appropriated by such institutions and for the benefit of the sick and disabled members and their families and the burial of the same, or for the maintenance of persons unable to provide for themselves, whether such persons are members of such institution or not."

The opinion of the court is long and involved. It is shown, for example, that the language of the statute or constitution, if clear, is given the ordinary meaning. If the meaning is doubtful, the facts must be resolved against exemption. Property exempted must be purely charitable. "A purely public charity" is a charity "which is indiscriminately dispensed to some portion of the public, without profit or gain to the donor." Two outstanding qualities are essential, first, it must accomplish the "ends wholly benevolent" without "profit or gain" to itself; and "through absolute gratuity" it must thereby save the benefactors from becoming burdens upon society and the state.

The court then considers very carefully the organization and administration of the institution. The corporation without the aid of gift, devise or bequest, and having no capital stock, purchased the infirmary upon its own corporate obligation to pay for it in the future. The institution was "operated and maintained upon revenues derived wholly from fixed charges against its patrons, and is paying the entire purchase price out of the properties of the revenues thus derived." Thus none of its assets, cost of operating or maintenance is derived from any charitable or other sources but from profits arising out of the conduct of the business enterprise.

It is not sufficient that a small portion of the activities should be devoted to charity in an institution seeking exemption from taxation. "The fact that the primary object of that business is to heal the sick and minister to the afflicted does not within itself control the case, for that is the object of all hospitals, of course, and the further fact remains that seven out of every eight beneficiaries are able to and do pay for the services rendered. In no event would these beneficiaries become charges upon society and the state, because all privately owned hospitals with like facilities, are open to them upon the same terms and conditions imposed by appellees. *The theory upon which charity hospitals are exempt* is that their chief object and accomplishment is to care for those who would otherwise become charges upon the state or society; whereas, the dominant accomplishment of appellee is to minister to those who in no event would become such burdens, and from which it derives a profit wholly inconsistent with the fundamental principles of charity, for charity operates without hope or expectation of gain, and is so inconsistent therewith that to accept it is to convert charity into a mere business transaction. When this rule is applied to the appellee and the business it is engaged in, it must take its position along with other institutions and concerns operated for profit, and share with them the burdens of government under whose protection it flourishes with such financial success. It is no more an institution of "purely public charity" than is the average physician, whose life is devoted to healing the sick and ministering to the afflicted, or the person, firm or corporation which by reason of large capital and business sagacity is so prosperous that it may and does dispense generous charity."

A hospital charitable in nature does not lose its right to exemption by charging for some of the services rendered, but the rendition of services by members without pay does not make the hospital a charity. The disposition of profits whether invested in improvements or not cannot give tax exemption. It is *held* that "in order to earn exemption the charity must show that it is at least substantially maintained by public or private charity which is its paramount purposes, and if it embarks in business for profit it ceases to be exempt; that if the number of pay patients preponderates it ceases to be a purely public charity, and becomes a business organization conducted for corporate gain, with incidental acts of benevolence and philanthropy; that the charity must be unmixed with private or corporate gain; that if it is not conducted solely for the benefit of the public it is not commensurate with the scope of the project and therefore not exempt; *that if the charges collected from pay patients are more than needed for its successful maintenance*, the exemption fails; that it must be shown that the charity is not endowed or held in trust; that its charitable features cannot be abandoned, and in case of dissolution must rest in public authorities for charitable purposes."

City of San Antonio vs. Santa Rose Infirmary 249 SW 501.

Miss Bessie Twining, a graduate of the home economics department of the University of Chicago has accepted the position of dietitian at Grant Hospital, Columbus, Ohio.

GENERAL LABORATORIES OF THE GRACE HOSPITAL

By C. I. OWEN, M.D., Director of Laboratories, The Grace Hospital, Detroit, Mich.

THE Grace Hospital's general laboratories which were completed and occupied on January 1, 1923, fill an entire upper floor of a fire-proof wing of the hospital and utilize approximately 3,500 square feet of space.

There are ten large rooms including a refrigerating room, an incubator room, a balance room, two toilets and four small storage rooms or closets. All of the work rooms have a north or northeast exposure and the outer wall construction is largely iron and glass with brick supporting columns.

Located Over Operating Suite

The laboratories are super-imposed over the operating rooms and connect with the operating room suite by a single short stairway and an elevator. They also have elevator service from all floors of the hospital.

The animal rooms, as will be noted by the floor plan, are outside of the general laboratory rooms so that odors can be excluded from the laboratory proper. A built-in gas incinerator is a part of the equipment. All waste and discarded specimens originating on this floor are consumed in the incinerator which is built into the side walls of the utility room. The incubator room is heated by electrodes controlled automatically by a Westinghouse Thermostat. Provision is made in dark room for storage of photographic apparatus, plates and development. The library has been constructed to serve also as a committee room for meetings of the attending staff committees, clinical conferences, intern conferences, etc.

The general laboratories serve the Miriam Memorial Branch of The Grace Hospital, The Grace Hospital Polyclinic or Out-Patient Department, and the main hospital. In addition to the director, a personnel of seven technicians and student technicians carry on the work. These laboratories are open to the private work of members of the staff of the hospital, many of whom make constant and daily use of its facilities.

In the construction and organization of these laboratories, the hospital authorities planned to provide every resource and all equipment necessary for every modern laboratory requirement, together with maximum space and adequate personnel. The laboratories have been in use three months and have justified the ideals and expectations of the hospital staff.

The post-graduate course in practical advanced laboratory technique and elementary laboratory technique are also carried out in these laboratories. Classes are limited to three in number and not all of the applicants for training can be accommodated. At the opening of the new laboratories, a more comprehensive theoretical and practical schedule of training was adopted and is now being carried out. The complete course covers six months. Nurses and technicians who have had some experience or training elsewhere, are given a shorter course of three months. The success of these courses has attracted much attention and almost daily inquiries from nurses and technicians, for particulars concerning the course, are received. The schedule of the course follows:

Schedule of Course in Advanced Laboratory Technique

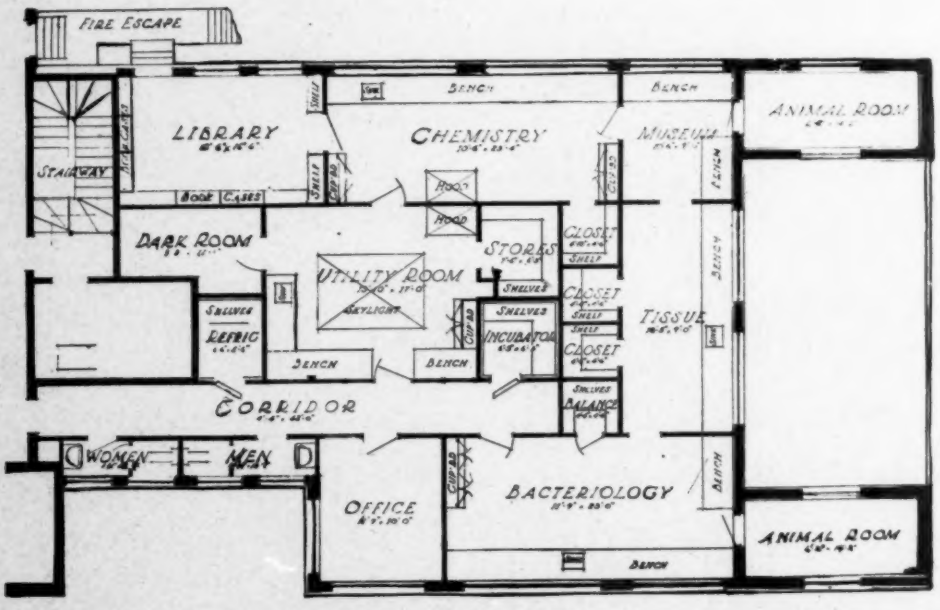
General principles of laboratory work	1 hour
Bacteriology in relation to medicine	2 hours
Immunology in relation to medicine	2 hours
Chemistry in relation to clinical laboratory work:	
General	1 hour
Qualitative	1 hour
Quantitative	1 hour
Physiology	2 hours

Theory and Practice

Urinalysis:	
Qualitative	1 hour
Quantitative	1 hour
Haematology	2 hours
Physiological chemistry	3 hours
Serology	2 hours
Body fluids and excretions	3 hours
Preparation of tissues	1 hour
Laboratory economics	1 hour

Practical Work

Bacteriology and serology	two months
Physiological chemistry and haematology	two months
Tissue pathology technique	two months



General plan of laboratories.

Upper left, Physiological chemistry laboratory; Upper right, Office of the director; Lower left, tissue pathology laboratory; Lower right, serology and bacteriology laboratory.

LIBRARY STATIONS PLAY IMPORTANT ROLE IN SEATTLE HOSPITALS

By HARRIET E. LEITCH, Head of Deposit Station Division, Seattle Public Library.

IN MAY 1921, the Seattle Public Library offered deposit station libraries to two hospitals, the Seattle General, and the Virginia Mason. This form of extension work was in the nature of an experiment as it was desirable to see how much the books would be used, whether the distribution could be conducted so that it would not be burdensome to the hospitals, and whether the loss of books would be heavy, before the plan should be proposed to all the hospitals in the city. The library furnishes the books and a trained librarian who visits each hospital once a week. The hospital supplies the book truck and arranges for any extra service.

Books Mean Many Contented Hours

The nurse in charge of each floor furnishes information regarding the rooms which may be visited. It has been found that, if a patient is able to read and suffers no ill effects by doing so, a book will give him many a contented hour. Some patients have friends in the city who bring them books, but even in these cases, friends with the best intentions often bring books which the patient has read or for which he does not care. With the regular library service, the patient has the satisfaction of making a selection from a varied collection which is drawn to his bedside. It is not necessary to display a large number of books, as the patients change constantly. A few additions and deductions each week keep the supply renewed. It has been the aim to furnish fresh, clean copies as far as possible. At the start, about 125 books were placed in each of the libraries; later the number was increased to more than 200 in the 120-bed hospital.

Service Open to Entire Personnel

The service is open to nurses, patients, and the entire hospital personnel, and is entirely free. As the books are for use in the hospital only, no regular library card is required. The record is kept on the book card on which is written the date and the patient's name and room number. At the end of the month, the charges are counted, giving the number of books which have been issued. It is merely an estimate, as a popular book passes from bed to bed in a ward during the week.

The general demand is for "something light" or "an exciting book to help pass the time," but enough non-fiction is sprinkled in to suit all tastes. The resources of the central library supplement the small truck load. Special requests, such as "a book on alternating currents" or "a story to read to a four-year-old" are supplied on the following day. It is important that these deliveries follow the requests promptly as the patients remain in the hospital but a short time.

Each Hospital Has Its Plan

Each hospital has its own plan of distributing the books. At the Virginia Mason Hospital the dietitian learns whether there is reading matter in each room as she makes her daily rounds. She also collects the books which are not in use. At the Seattle General Hospital, the nurses see that the patients are well supplied, and the nurse in charge of records carries off the idle books when she leaves the charts on each floor.

The trucks were furnished from materials on hand in the hospital. An iron frame which had been used to carry laundry baskets was fitted with a shelf, the entire truck was painted white, and although it is large and can not be taken into a three-bed room, it is very easily moved and carries all the books. The other truck, which is shown in the picture, is a double decked dressing carriage.

Scheme Works Successfully

The library assumes all responsibility for lost books and the number is small considering the size of the circulation and the floating population which is served. A total of 618 books has been sent to the hospital and only twelve volumes are missing. The circulation for seven months was 3,750.

The entire scheme works easily without putting heavy obligations on the hospital. After a seven months' trial, it has been pronounced a success by the hospital authorities, and the librarians are most enthusiastic over it.

Many weary hours are passed away with the books furnished by the library station.

The library station furnishes the ward patient just the book he wants to read.

THE INFORMATION DESK

No satisfactory solution to a problem in your hospital is too trivial to pass on to other workers in the field. No question that perplexes you is too small to bring to the attention of those with greater experience in the field. This department is the readers' exchange, and its usefulness is dependent upon the measure in which its readers share their problems and their discoveries.

LET PATIENTS INSPECT INSTITUTION

Bridgeport Hospital, in Bridgeport, Conn., makes it a matter of routine to ask all special nurses to take their convalescent patients through the institution, beginning with kitchens, dining rooms, storerooms, etc. This practice contributes greatly in arousing public interest in the institution.

Another feature which has proved both of moral and financial benefit to the institution is the annual custom of inviting the various luncheon clubs, such as Rotary, Lions, Kiwanis and Chamber of Commerce to visit the institution where they are served the regular nurses' luncheon and then taken on a tour of inspection throughout the institution.

PORTABLE SCREENS VS. DOORS FOR OPERATING SUITE

A recent correspondent asks if a portable screen is not superior to a door between the operating suite and the connecting corridor.

The answer is, No.

Some of the reasons for this unqualified negative are listed as follows:

With only a screen at the opening, the noise from the operating room would be transmitted to the rest of the floor, and vice versa.

Odors, peculiar to the operating suite, would permeate the rest of the floor.

The screen would not exclude drafts, since it is probable that the building would be so situated that it would be subject to the prevailing winds.

Visitors of patients in other parts of the floor might through mistake or curiosity wander into the operating suite.

Doors may be locked so that when the suite is not in use, there would be no danger of instruments being stolen.

A portable screen would probably be a nuisance to handle, might be easily blown or knocked over and probably would be left stored in the corridor.

Double or single swing doors would be preferable. If our correspondent is endeavoring to get away from the necessity of opening and closing doors and still wishes to retain exclusiveness for the department, he might install a labyrinth, similar to the entrance of a dark room, or better still an ante-room or subcorridor which could serve as a sort of clearing house for the various rooms of the surgical department.

"CHAMBER OF HORRORS" FOR NURSES

In spite of "line upon line and precept upon precept," the destruction of valuable hospital equipment through careless handling is a source of great concern to the average hospital superintendent. One superintendent of nurses has a "chamber of horrors," which the students in the training school are invited to inspect occasionally. It contains such articles as: rubber catheters burnt during sterilizations, record syringes with piston impacted, the serum having been allowed to dry, patients' clothing badly creased through careless folding, stained linen after boiling in laundry, clinical thermometers broken in a single week, a scrub brush which was responsible for obstruction of sewer, etc. The visual method has been found to be more impressive to the average student.

HOW TO REMOVE ADHESIVE

Although alcohol is an excellent solvent for the removal of adhesive, it gives rise to such pain that Abbe and Dickinson suggest the use of gasoline instead. If the tip of a corner of the plaster is scratched up with the finger nail, a drop or two of gasoline can be introduced between the skin and the raised surface. An inch or two of the plaster can then be raised at once and a further portion of gasoline introduced by means of a pipette or medicine dropper. In this way a plaster dressing may be removed daily, if necessary, without occasioning the least distress to the patient.—*Journal American Medical Association.*

PATIENTS HAVE ORCHESTRA

Patients at the Municipal Tuberculosis Sanitarium, Chicago, have an orchestra of ten pieces which gives weekly concerts, classical and popular alternating. There is also a children's chorus which is divided into four classes which assemble twice each week for practice. Each class meets once a week for individual training. With the orchestra and chorus, excellent programs are arranged.

CARE OF KITCHEN EQUIPMENT

Kitchen equipment very often dies an untimely death because of the negligence of the kitchen help in keeping it well oiled and cleaned. The economy of many of the mechanical devices is lost if they are not cared for regularly. There is no doubt but that the mechanical equipment of the hospital gets hard usage and, for this reason, special attention needs to be given to its regular care in order to produce the most satisfactory results.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
Department of Nursing Education, College for Women,
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THE TEACHING OF PRACTICAL NURSING*

BY BERTHA HARMER, B.S., R.N., INSTRUCTOR, ST. LUKE'S HOSPITAL, NEW YORK, N. Y.

AS OUR primary concern is to ingrain proper habits of feeling, thinking, and acting, and in all things to help the students to help themselves, it seems advisable to discuss with them as early as possible the laws governing the formation of habits as explained in the chapter devoted to this subject in such books as "Talks to Teachers" by James. They will thus learn that their feelings, their power of observation, of absorbing and assimilating knowledge, and of applying it with skill will depend upon the strength and character of their own desires, their degree of interest and attention, the time spent in thinking or reflecting (that is in making many and varied desirable associations of ideas in their minds), and upon the persistance and frequency with which they practice in making the desired responses.

Individual Thinking Essential

In this way, they will learn their own responsibilities in the process, at the very beginning. They will learn that their instructors can teach them but cannot, (to use an ungrammatical expression), "learn" them; and what they are at the end of their course will inevitably be the result of their own daily thoughts, feelings and actions. They should know, for instance, that a poor memory, failure to observe important symptoms, and lack of skill, (defects which make a nurse a menace), are all due to daily lack of attention to these laws. We lose our heads in emergencies, in new situations, in examinations, because we have failed when learning to make deep, frequent, and varied associations of ideas in our minds; or because the consciousness of inadequate preparation and fear of failure set up inhibitions which check all these associations and hinder the free flow of ideas or proper response in action. Theory without practice, practice without theory, failure to correlate theory with practice, and cramming for examinations, are, for the same reasons, all bad and unproductive.

Practical Opportunities Needed

If our students are to develop useful and desirable habits we must provide the proper conditions, ideas, and opportunities for practice. The class arrangement, the general atmosphere created, the presentation and development of the lesson must be such as will stimulate interest, attention, thinking, and the free exchange or expression of ideas in word or action. We should allow for different ways of expressing what the students know—writing, speaking, or demonstrating—because they may know and can express themselves in one way better than in another; for instance, in action in the wards better than in class or on paper, or *vice versa*.

The attention created should be voluntary. In teaching practical nursing few artificial means are necessary because the students really feel the need of learning this subject, and are thus interested and eagerly attend. Bodily ease, and freshness and freedom from tension or strain have a great deal to do with the students' ability to attend. James says, "It is the relaxed and easy worker who is the efficient worker. Tension and anxiety are the surest drags upon steady progress and hindrances to our success." It creates inhibitions which check all the associations in the mind and free exchange in expression of ideas. It is always a great advantage to have classes in small groups, teacher and pupils seated around a large table or around a bed in a natural way. Elevation on a platform seems often to be an impassable barrier between the teacher and students, which sets up inhibitions to thinking and free expression.

Teacher's Attitude Paramount

The success of the lesson will depend largely upon the teacher's interest, her knowledge and experience, sympathy and understanding of her pupils, the amount of thinking she herself has done, and her ability to present the lesson in an interesting, organized way. Each lesson should be carefully prepared and provisions made for lecture or recitation, demonstration, and practice. The lesson should never be a mere replica of the textbook but should be enriched by illustrations drawn from her own experience, cases in the wards, and the experience of the students.

The first lessons taught should deal with general conceptions, that is, with the hospital as a home for sick people, the preparation for the patient, his reception and care, his comfort and general hygienic care, such as attention to diet, rest and sleep, and elimination of bodily wastes. By degrees, we come to specific treatments and the care in specific diseases and conditions. This is the way in which man naturally learns; first by observing general situations then gradually analyzing, noting details, putting them together in new and useful ways, and applying them to new situations.

Each lesson should lead logically to the next. If these lessons are grouped into nursing measures used in surgical

*The second and last installment of Miss Harmer's discussion of practical nursing instruction. The first installment appeared on page 587 of the June, 1923, issue.

disease, and in medical diseases, etc., it helps greatly in correlating the lessons in practical nursing with the ward experience and with other subjects taught. This is of value also in discussing the nursing care in circulatory diseases, infectious diseases, or following operations on the alimentary tract, or the reproductive system, etc.

Attention Centered on Patient

The central thought in every lesson should be the patient. All the facts presented should be grouped in a logical order so as to emphasize their relative importance, and relation to the patient. For instance, in teaching any treatment, before giving the demonstration, we state what it is, its purpose, diseases in which it would give relief, the condition of the patient, its good and possible bad effects, the part it plays in the general scheme of treatment, and principles underlying the method of procedure. In this way, the thought is focused not merely on the technique but on the patient and his condition. My experience in the classroom has shown me that students often give treatments and medications without knowing why they are giving them, the results to expect, or even the diagnosis of the case. To avoid this, from the time students are given the care of patients, they should be required to keep and hand in "case records." These should form a basis for discussion in class, and should be reviewed by the instructor and returned to be incorporated in the notes on medical or surgical diseases, as the case may be.

To leave time for this vital correlation of theory and practice the students should be obliged to take as few notes as possible. It is impossible to attend, follow a line of thought, think or make associations, when attending to scribbling notes as fast as possible. Their textbooks should give the required information.

Each lesson prepared should provide thoughtful questions which test the students' understanding and lead them to make the proper association of ideas. Comparison questions are good. For instance, when teaching an irrigation of a cavity lined with mucous membrane such as the bladder, it is well to compare it with irrigations of other cavities such as the nose, throat, stomach, or colon, as to similarities or differences in anatomy, the purpose of the treatment, the inflammatory condition present, the discharge, the solutions used, their temperature, the apparatus used, and the character of the return.

Questions as a Study Method

Time should be left at the end of each lesson for making the assignment clear. Textbooks, reference books, charts and histories of patients, should be used. A list of thoughtful questions to be answered and reports of cases in the wards are very helpful. Psychologists tell us that text and reference books used should be thick, not thin; that is, they should contain sufficient detail to make the subject interesting and to insure the proper association of ideas and correlation of theory and practice which the average student is incapable of making for herself. Encourage the class to form groups for study and discussion and to set aside a definite time for this.

The demonstration should be a finished work of art. It should stimulate the student's admiration, emulation, desire to perform the treatment and to do her very best. The conditions and the equipment used should, as far as possible, be the same as those found in the wards. The technique used should be as simple as consistency with the essential requirements of the procedure, the safety and comfort of the patient, and artistic finished work will permit. Simplicity, directness, conciseness are characteristic of all great art. The greatest literature, music, and various forms of art are said to be that understood and felt by the simplest minds, and the greatest master of art is the one who accomplishes his work with the fewest lines or strokes. This simplicity in our work makes for efficiency, accuracy, and thoroughness. It saves energy, work can be done more quickly, therefore with greater comfort to the patient, and a simple technique can be more easily adapted to new situations.

Directions Printed or Typewritten

Printed or typewritten directions for the technique should be given for future reference. Time spent in copying from dictation is not only a criminal waste, but is deadly dull and robs the work of all interest. This time should be spent in the discussion of patients or in practice in getting ideas and responses fixed in the brain, muscles, and fingers, rather than in note books. These directions should be grouped in a logical order in the way in which the student should actually proceed. For instance, under such headings as (1) articles required for preparing the patient; (2) for the treatment itself; (3) for the after-care; (4) preparation of the patient; (5) the method of procedure; (6) the after-care; (7) the clearing away, etc.; (8) charting of results and general remarks. Students will then not be so likely to forget things and will learn to work systematically.

The instructor should begin the demonstration with the first step in the preparation and leave nothing unfinished. Consideration of the mental effect of the treatment on the patient, his feelings and comfort, should be emphasized throughout, and reasons given for each step. It is a great advantage to have a real patient or in some cases a student as patient. When a doll is used it should be treated as a real patient as regards exposure, comfort, and all other respects. The necessity for a standardized technique within the hospital should be explained, but at the same time the students should realize that there may be other methods used, probably equally as good but differing in details. The technique adopted should be that approved by doctors, the superintendent of nurses, instructors, supervisors, and head nurses.

A sound preparation in technique and sufficient practice in each procedure to insure skill are vital to the nurse not only in the hospital but in her whole later experience. It is very difficult to develop skill or confidence later if these are neglected during the student's training.

The practice hour should immediately follow the demonstration in order to fix it in the memory. This is the time, too, when the students are most ready and eager to try it. If there is not provision for each student to practice the class may be divided, one section being assigned a study period. All practice should be carefully supervised by the instructor. Students may be patients for each other but they must be treated as real patients. Dolls used should, at all times, be treated as real patients. It is often an incentive to the students if the principal, supervisors, or head nurses are invited to observe and pass judgment on the work done. Results should be known by the students.

Value of Ward Practice

When habits are sufficiently formed in the classroom, the students may be allowed to practise in the wards, but only that which they have been taught and given permission to do. This is apt to be a very critical time for the young student so she should be carefully supervised by the instructor and guarded from acquiring wrong impressions and undesirable habits. Without supervision, all the work in the classroom may be undone.

Following the practice, students may be asked to write out as an assignment the aims of the procedure and what they did to secure the desired results. For instance, in making a bed, they should tell in what ways they provided for the comfort of the patient, durability, economy of materials, time, or energy, and a finished, artistic appearance. This impresses proper standards and trains them to keep their minds on results.

After the students have learned various procedures they may be assigned demonstrations to be given before the class. These should be in the nature of a problem for the student to work out. For instance, after learning the devices used for making patients comfortable and how to make a convalescent patient comfortable in bed, problems such as how to make a patient with heart disease, or with a fractured femur, or sore back, or a weak, helpless patient comfortable in bed may be assigned to different students. Two or three may demonstrate together while the rest look on, take notes, and be prepared at the end to give first the good points noted and then constructive criticism.

Demonstrations Stimulate Interest

Demonstrations given at the end of the preliminary course, the first, second, and third years, to which the whole school, doctors, and members of the alumni are invited, are most helpful to all concerned in keeping up proper standards and a uniform technique.

In order to draw out the initiative, executive ability, and sense of responsibility of the students and to make these demonstrations have the stimulating characteristics of a play rather than a dreaded test, the plan and preparations may be handed over as an assignment to the students themselves, with the advice and assistance of the instructor as required. They often astonish us with their ability in preparing other entertainments, and why not in this? When prepared, a list of the demonstrations and demonstrators should be given to the superintendent previous to the demonstration.

While the preliminary class is in the classroom, for instance, after the first lesson on the hospital in which we discuss its purpose, relation to the community, location, structure, general plan, departments, ventilation, heating and lighting, the students may be taken through the hospital on an observation tour. On return they should write out what they had observed, in regard to the above, and their relation to the patient. Different students might be asked to state also just how they would proceed to various departments, such as the diet kitchen, x-ray department, and other departments of the hospital. Similar tours and reports might follow succeeding lessons, definite instructions being given always as to what to observe. Finally they will come to observation of the patient and his condition. In the same way trips might be made to other hospitals, health centers, or museums. The reports should be graded so that the students may know the results and their progress. In the discussion of reports, good points should be given first and constructive criticism emphasized. This not only trains the power of observation and the memory, but broadens the students' view, and gives a true understanding of the hospital in relation to the patient and the community.

Theory and Experience Correlated

The value of this experience will depend upon the amount and character of the clinical material and the use that is made of it. As stated in the plan, the student's progress from service to service and from elementary to advanced nursing must be carefully planned as well as correlated with the theory taught in the class room. This is the key to the successful use of clinical material, provided proper correlation is made. Dr. Snedden of Columbia University commends our system of education for its possibilities of correlation. He states, however, that "all our experience with vocational education to date proves that unless the training school will itself take charge of this welding process, the normal average student will not do it. In the light of the best psychology we have at our disposal, it is probable that only about two or three per cent of minds are born with enough ability to make these applications alone."

This means not only correlating class work with ward experience, and medications or treatments with the patient's condition, but supplying the links between the patient in bed and in his home, his work, and his pleasures. It has been my experience that student nurses make none of these connections unless we supply the links. Upon seeing a patient dressed for the first time, I have often heard students say: "Oh, Mr. Smith, I hardly knew you in your street clothes!" That is because they never once thought of him as dressed like other people, or in any way as a member of society. To avoid this lack of correlation, from the first day students are allowed in the wards to dust, make beds, and perform other duties, they should be required to keep and hand in print *experience records*. For instance, if the experience is in making beds, the record should state in separate columns the date, time of starting and finishing each bed, the name of the patient, the diagnosis, allowed up for —— hours in the remarks column, the kind of bed made in the treatment column, the results in the remarks column.

Need for Accurate Records

If the experience is in giving the morning or evening toilet the record should state the date, time, name of patient, diagnosis and symptoms noted; in the remarks column the condition of mouth, hair, nails, body and bed, etc.; in the treatment column the actual care given and, in the remarks column, the results. In the preliminary course the experience should be recorded in detail until habits are formed. With more advanced experience, the records will be more in the nature of case studies. By going over these with the students, the instructor can help them greatly in learning how to plan their work. They also form an accurate basis for regulating their experience, for study of its educational value, for cutting out wasteful repetition, and for developing a system of credits for the ward experience. Such records will focus the student's attention on her patients and on the reasons for doing things. They will improve her powers of observation, memory, and executive ability. A summary of these experience records should be kept in the training school office.

Another essential point in regulating the laboratory experience of the students in the wards is that here, too, the patient must be made the unit of study as in the class room, lecture, or clinic. That is, a student should study and care for a patient suffering from any disease through all its phases and manifestations. Any system which breaks up this unity by specialization or assigning the treatment and care of a patient to different nurses, however efficient it may be from the standpoint of getting the work done, robs the experience of much of its educational value. It gives an incomplete and distorted picture of the disease and its treatment. It directs the student's attention to the treatment and technique, and not to the patient or disease. It robs nursing of all its art, for just as specialization of labor in industry has reduced it to a se-

ries of isolated, mechanical processes, so specialized assignments become unrelated, unintelligible, uninteresting tasks to student nurses.

Specialized Assignment a Handicap

We cannot develop artists or the love of an artist for his work by such a system. Some examples of this specialization are found in the method of assigning all the special diets, all the temperatures, all the charting, all the treatments, or all the medications to one particular nurse in each ward. Another form is the assignment of the care of a patient during part of his illness (the acute stage) to one nurse and the balance to another or several other nurses. In obstetrics, this specialization is seen in the separation of the care of mother and child. All this specialization besides being disastrous to the education of the nurse, is one of the most common sources of misunderstandings, discomfort, and unhappiness to patients in our hospitals.

Students are must more apt to form correct impressions, to focus their attention on the patient, to correlate theory with practice, and to carry out the technique with skill when all such treatments as enemata, douches, therapeutic baths, catheterization, and other advanced procedures (in addition to the classroom instruction) are demonstrated by the instructor or head nurse in the wards on patients for whom the treatments are ordered.

In consideration of the patient's feelings not more than two or three students should be present. On the following days these student give the treatment under the direct supervision of the instructor until given to her satisfaction. The demonstration should be in the nature of a clinic, that is, the chart read, the patient's condition discussed (not in hearing of the patient), and the part played by the procedure demonstrated in the general treatment. A list of treatments to be taught each group should be kept by the instructor and each treatment stroked off when given. This method is used at St. Luke's Hospital, New York City, to great advantage.

A printed card with a full list of treatments for each student follows her from ward to ward (through the training school office). Treatments taught and given in each ward are marked by the head nurse. This is not only a check on the student's experience, but on the teaching and use made of clinical material by the head nurse. In addition to this, another instructor spends the greater part of her time in the wards discussing with each nurse the patients under her care. This instructor also teaches practical nursing in the classroom. Reports of these discussions and quizzes are handed in to the directress of nurses.

Underwood & Underwood

This rare old engraving of Florence Nightingale has just been presented to the American Red Cross Nursing Service by Mrs. August Belmont.

Bedside clinics are also held by the doctors who lecture on medical and surgical diseases. Students also "make rounds" with the doctors. In the surgical wards the students also assist with "field rounds" made by the surgeons and house staff. Dressings are done by the surgeon or by an assistant under his observation.

When a student nurse, I found round table talks with the head nurse in the morning to hear the night report read, the condition of the patients discussed and the assignment of the day's duties, to be most interesting, instructive, and memorable. They give that sense of unity, of team work and general knowledge and responsibility which is so desirable for the whole ward.

Constant supervision by head nurses and supervisors is necessary to keep up proper standards and to insure efficiency. Much of the success of our teaching will depend upon the quality of the supervision and the personality and preparation of the supervisors.

Like the instructors, supervisors should have specific aims, a well-thought-out plan, a definite method of procedure based on principles, and a system of checking and recording results. Supervision should always be constructive and should begin with the patient, not with his surroundings. Each student should be made responsible for the care of her patients. It is a good plan to have students, when going off duty for rest hours, write in a book kept for this purpose, the care she wishes the nurse relieving her to give her patients. This develops a sense of responsibility and ability in planning work.

Reports of the character of each student's work, attitude, general fitness, and progress made should be handed in to the directress of nurses by both head nurses and supervisors. The work of a supervisor may be judged by the growth and development of those who are supervised.

Examinations should be given in both the theory and practice of nursing. The practical examination should test both skill and the application of theory. In conclusion, it must be stated that each of the above topics, if adequately dealt with, might be developed into separate articles of considerable length. In covering such a comprehensive subject in one paper, however, only such points as seemed most essential to the writer could be touched upon.

"There is no pride so mean, so contemptible, as that really mean or degrading or unclean, which our duty calls us to do; but if ever pride leads us to leave part of our duty or work undone or ill-done, then indeed we are degraded."—Florence Nightingale.

BELLEVUE TRAINING SCHOOL CELEBRATES FIFTIETH ANNIVERSARY

ON THE evening of May 8, Bellevue Training School celebrated the fiftieth anniversary of its inauguration as the first training school for nurses in this country. The exercises were held in Carnegie Hall which was decorated with flags and banners upon which were inscribed the names and dates of founding of the forty-eight schools of nursing in New York City during the last fifty years.

In addition to the speakers and distinguished guests, the board of women managers, successors to that first group who founded the school in 1873, the staff of the training school and the entire student body of 226 pupils were seated upon the stage. Members of the probation class acted as ushers. The Bellevue Alumnae Association and delegations of student nurses from all the New York hospitals and nursing organizations filled the parquet to capacity. In the alumnae procession were many who graduated in the earliest classes. The scene presented was a stimulating and inspiring one, for so many nurses in uniform have not been gathered together since the days of the War.

Dr. George A. Stewart Presides

Dr. George A. Stewart, president of the Academy of Medicine and for many years a visiting surgeon to Bellevue Hospital, presided. Miss Lucy Minnegerode, class of 1898, superintendent of Nurses, U. S. Public Health Service, gave a salutatory. Addresses were made by Miss Annie Goodrich, formal general superintendent of Bellevue and Allied Hospitals.

Major Merrite W. Ireland, surgeon general of the Army, was the principal speaker of the evening. In his address, he brought out the fact that the trained nurse had made it possible for sick and wounded American soldiers in the World War to receive the best care that soldiers of any country had ever received in any war. He pointed out that the great advances in the nursing profession had come about as the result of war conditions, and traced the development of nursing from the pioneer services of Florence Nightingale in the Crimean War in 1854 down to the achievements of the present.

He praised the work of Dr. Elizabeth Blackwell, who inspired by the counsel of Florence Nightingale, had selected 100 women whom she placed in Bellevue for a short period of training prior to their services on the battlefields of the Civil War. "The final result of their work," he said, "was the founding of your training school."

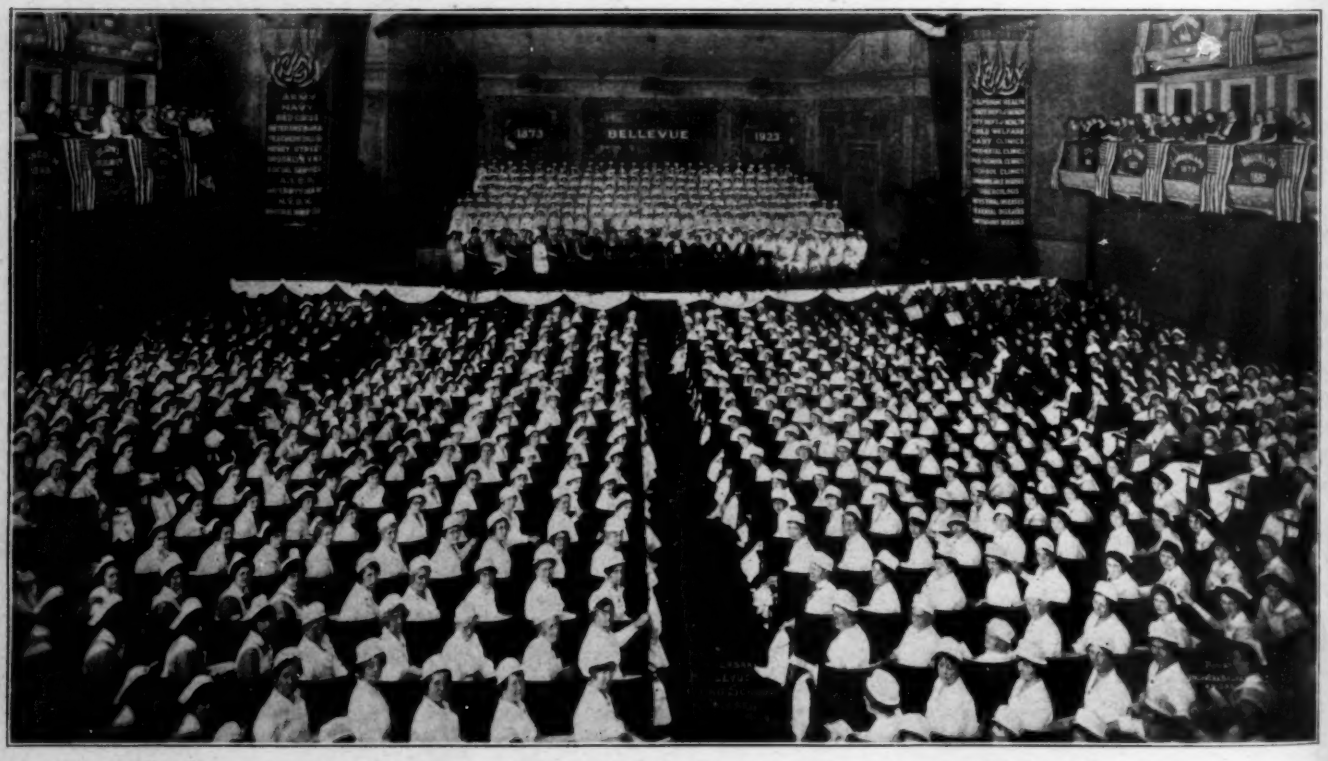
Prizes Offered for Nursing Songs

Prizes had been offered to the student nurses of any school for the best words for a nursing song set to original music, and the best words set to any popular music. One of the pleasantest features of the evening was the singing of the song selected, by all the nurses present. The words of this song were written by Miss Marion Pitts, class of 1924, of the City Hospital School of Nursing, and sung to the tune of "The Battle Hymn of the Republic."

Song for Nurses

Tune—"Battle Hymn of the Republic"

What urgent needs of all the world are challenging our cars,
That asks us to devote the best of all the passing years?
'Tis the burden of the helpless and the sound of children's tears,
That stirs us to the work!
Courage for the sake of others,
Courage for the sake of others,
Courage for the sake of others,
Our ranks are marching on.



Assembly at fiftieth anniversary of Bellevue Training School for Nurses, Carnegie Hall, May 8, 1923.

We must stop to listen often, lest our purpose we forget.
And, again, we hear the needs of men that never have been met.
We have need of all our science for the task that we have set.
Our service knows no bounds.
Answering to the call of duty,
Answering to the call of duty,
Answering to the call of duty,
Our ranks are marching on.

We do dedicate our talent and we dedicate our mind,
To the service of our country and the service of mankind.
May the knowledge of our purpose all our acts forever bind,
That nursing may exalt.
Ever onward are we facing,
Ever onward are we facing,
Ever onward are we facing,
Our ranks are marching on.

A charming souvenir containing sketches and illustrations of the history and development of the training school and the organization of the alumnae association was presented to everyone present.

FIFTIETH ANNIVERSARY OF CONNECTICUT TRAINING SCHOOL FOR NURSES

OF ALL the ways by which a school of nursing could celebrate the semi-centennial anniversary of existence, no more enjoyable or fitting plan could have been evolved than to announce the starting of the Yale University School of Nursing.

The program of exercises for May 15 and 16, included much that was a record of accomplishments of which the Connecticut Training School has reason to be proud, together with more plans for future development that are stimulating and inspiring to all who think of nursing education in terms of community service.

Reunion Bridges Past History

The reunion of the classes in Gifford Memorial Chapel was a happy occasion which brought together classmates who had been widely scattered, and the reports from the representatives of each class bridged the period since graduation, describing activities in many and varied fields of work. The first class was graduated in 1875, and the only living representative of this class was an honored guest at all of the festivities.

At the informal tea given at the home of Prof. Henry W. Farnam, the receiving line included four nurses dressed in the uniform worn during four periods of the school's history. It was a most interesting exhibit of the evolution of the uniform from a fitted basque and full skirt of gray, alpaca worn over a hoop skirt, to the trim and trig uniform of blue gingham, worn short enough to clear and not sweep the floor, and with short sleeves instead of long full ones. The voluminous apron, large mob cap, and high collar of former days was replaced by a fitted apron, small Normandy cap and low collar. This study of uniforms was only a detail, but it furnished interesting evidence of steady progress even though each change when made had been slight.

The outstanding event of the first day was the dinner at the New Haven Lawn Club, where 350 guests were seated in the large dining room. Following the dinner Prof. Henry W. Farnam outlined the history of the Connecticut Training School and mentioned some of the local pioneers in the education of nurses. He also announced that Miss Rachel Bailey of Northampton, Mass., who graduated in 1875 and who is the only living member of her class, was the oldest graduate present. The long distance cup went to Mrs. C. E. Longwell who came from India.

Professor Winslow Toastmaster

Professor Farnam introduced Prof. C.-E. A. Winslow of Yale as toastmaster. Prof. Winslow declared that when he first came to New Haven some eight years ago he was told that Connecticut was backward and her people too conservative. He said that he found these statements not true as developments at Yale, in the state and the city have shown since his residence here.

Prof. Haven Emerson of Columbia University spoke on "The Role of Nursing in the Public Health Program." He said that naturally there would be opposition to higher education for nurses. There will be many, he said, who will contend that the nurses are crowding out the physicians. "The only physicians that will be crowded out however," he explained, "are those about to fall off the edge anyway."

He warned the nurses that they must be careful in taking positions. They must not take places which they are not trained to fill, and he instanced municipal and state offices, such as heads of "bureaus of hygiene" and "schools of medical inspection" which he contended should be filled only by physicians. "Be mistresses of your own profession," he told the nurses.

Dr. Willard C. Rappleye, superintendent of New Haven hospital, spoke on "Medicine and Nursing Education." "The knowledge of the causes, treatment and methods of prevention of disease is far in advance of our application of that knowledge," he said. "The present need is an interpretation of these facts into terms of public and community education looking toward the conversion of health. The public health movement is designed primarily to prevent disease, to prolong life, and to promote physical health. We need a group of leaders in the medical and nursing professions who will not only participate in, but who will be able to shape and guide broad social and community policies regarding health."

Miss Annie W. Goodrich, director of the Henry Street Settlement in New York, and dean-elect of the new Yale School of Nursing, was in her happiest mood.

New Era in Nursing History

"The creation of a school of nursing by Yale marks a new era in the history of nursing," declared Miss Goodrich. "The celebration of the 50th anniversary of the Training School for Nurses brings to a close the first era, which has been one of unprecedented growth and splendid achievement. In the brief period, 1,500 schools have come into existence from which are graduated yearly approximately 15,000 nurses.

"Through the service these students have rendered during the period of their training it has become possible to care for the sick of all classes in institutions previously used only for the sick poor, in many instances under most pitiable conditions. Their presence has made possible the introduction of aseptic surgery and has provided a great and ever increasing body of trained women who render a type of care for the sick in the homes never before dreamed of.

"The last half century has called for adjustments to which the schools of nursing, as departments of institutions for the sick and not of institutions of learning, (and, therefore, conducted by the apprenticeship methods), were

pre-eminently unable to adjust. Nevertheless, in the past decade, there has been a steady raising of the standards of nursing, care and enrichment of the curriculum through the establishment of nursing education.

"The School of Nursing at Yale university is unique in that it makes possible, under conditions that nowhere else exist experimentation in every branch of the undergraduate and graduate work in order that a program of education may be evolved that will make as important a contribution to the field of preventive medicine as did the earlier school of nursing to curative medicine. This is an extraordinary opportunity."

President James R. Angell of Yale was to have spoken on "The University and Nursing Education" but, because of illness, was unable to attend the dinner. In his place, as representative of the university, was George Parmly Day, treasurer, who spoke briefly.

Gift of $500,000 for Nursing School

The morning session May 16, was held in Sprague Hall. Abby E. Bigelow of Meriden, president of the Connecticut Nurse Association, presided. Emma Leslie Stowe, for ten years superintendent of the Connecticut Training School, received a hearty greeting, and spoke on the relation of the training school to the private duty nurse. Carolyn E. Gray of Cleveland told of a gift of $500,000 from Mrs. Chester C. Bolton of that city for a University School for Nursing, also of a drive for $2,500,000 to build a children's and maternity hopital. The speaker said that $2,000,000 were already in sight.*

Miss Ella Phillips Crandall, of the American Child Health Association, spoke of the pride immigrant women feel in the increased weight of their children under health auspices. "I wanta paper for my man," said a Polish woman of Long Island to prove what had been done. The speaker noted the warning that where worry and fear are kindled by competitions the effects are bad. She looked forward to the day when children in the earliest years shall know health rules as their history and mathematics so that obedience will be automatic. Twenty-four of the thirty-six nations in the League of Nations have junior Red Cross organizations and fourteen have their little magazines.

Alice Shepard Gilman, secretary of the State Board of Nurse Examiners, discussed "The Value of Nursing Organization."

Luncheon was served at the New Haven Lawn Club, and the large room was crowded, for the notable list of women speakers drew nurses from all quarters eager to hear the leaders of their profession. Mrs. Henry Andrews Bumstead, chairman of the executive committee of the Connecticut Training school, presided acceptably and introduced the speakers with fitting words as to their records. Mrs. Bumstead's announcement that Miss Kingsbury of Waterbury had given $1,000 to the Alumni fund, drew the first applause. Among those present were Miss Caroline Hazzard, ex-president of Wellesley college, and her sister, Mrs. Irving Fisher. Many friends and officers of the Connecticut School of Nursing were in the audience, including Mrs. W. H. Fairchild, secretary of the executive board of the school since 1902.

Miss Mary Grace Hills, superintendent of the New Haven Visiting Nurse Association, was received with a cordiality that bespoke appreciation for her efforts of eighteen years. She was trained in the New Haven hospital school under Emma L. Stowe, superintendent of nurses for eleven years, now retired. In her address, Miss Hills referred to Mrs. Theodore Munger, Mrs. Thomas Bennett and Miss Prudden as the incorporators of visiting nurse work locally, beginning of the work being made January, 1895. The insignia, the Maltese cross, stands first for service; the arms for bedside work, prevention, education and cooperation. In 1906, nursing through the school began; in 1907, the School for Nurses asked that their pupils might do some house-to-house work. Miss Hills traced other developments, noting that 164 school nurses have worn the visiting nurse uniform during these years. Tuberculosis work dates from 1907.

The address of Mary Adelaide Nutting, director of nursing and health in Teachers' college, was frankly for education of advanced type for nurses. She spoke of the 2,000 schools of nursing in the United States, only 15 of which are in connection with the universities. At the Bellevue anniversary of the 1,200 or 1,500 nurses, only a handful in a back gallery wore the cap and gown, a very few, the master's hood. She rejoiced in what Yale is doing in tying up the calling with the university as are other professions. She traced the history of training, naming three periods, the first of service only, an effort to meet the demand of the hospitals which increased enormously, 400 in one decade and 600 in the next. There was no time to consider education. The students worked twelve hours a day on cases. In the second period they went to homes in the community. The third period was one of educational advance. In ten years there was an increase of eighty-three per cent in registered nurses. They are now graduating nearly 18,000 per year. There are sixty-seven forms of work listed for nurses. Dr. Emerson had warned those not qualified not to undertake public health work. The speaker recalled the long hours nurses had formerly to endure. Minnesota first linked nursing with a university.

Miss Mary Beard, director of the district nurse association of Boston traced training from the days when books were little used.

"We wanted to learn about pneumonia because we had patients with that disease; so by taking temperatures we became interested in what the pulse signified." Miss Beard advised young women not to adopt the calling unless they liked people. National organization of public health nursing began in 1912. There are now 12,000 such nurses and Professor Winslow says 55,000 are needed. Miss Beard quoted Dr. Emerson as saying seventy-five per cent of poverty is due to disease.

Room for All Kinds

Mary Sewell Gardner, district nurse expert of Providence, who published the first book on that subject, noted the increase of such nurses from three to sixty in that city in twenty years. She said the nurses of today should rejoice that higher education is to mark the profession of the future, but hoped they would not be discouraged with their own experiences; she felt there was room for all. Miss Gardner struck some new notes, saying that health is not the most important thing in the world and that many who had a long sickness had profited by it. She said a nurse should consider other issues than mere healing. On the economic side, she said the question whether the body politic is to take over all the activities that are now volunteer, is full of interest. She looked forward to a time when fewer nurses would be needed because there would be less disease.

The climax of the celebration came Wednesday evening, when Prof. Henry W. Farnam, as president of the General Hospital Society of Connecticut, presented diplo-

*The drive went over the top to a grand total of $2,630,000.

mas to the graduating class of eighteen in Sprague hall.

Dean Milton C. Winternitz of the Yale School of Medicine spoke on medicine and nursing, saying they are behind other branches of science, though great strides had been made. He foresaw that there would be two classes of nurses, one highly trained, the schools ever raising standards; and the other "nursing attendants" or "practical nurses" as they are somewhat irregularly called, who could get in nine months the knowledge they needed. He said the trouble with modern medicine is that it has lost the "human" touch of the old family doctor; he didn't know much as medical science goes today but he knew his patients and their forbears; he could give the individual assurance that the specialist has not the time to concern himself with.

In reply to those who ask why sick people don't go to the hospital, he said there will always be home cases and home nursing, partly because a hospital necessarily must concern itself with efficiency.

Miss Woolley's Appeal to Women

The principal address was by President Mary E. Woolley of Mt. Holyoke College, who talked on "The New Citizenship." She told of the nurses in uniform she saw at Peking and reminded the graduating class that they belong to a world sisterhood. She spoke of the expanding field for women since the "seminaries for females in 1840." Oberlin then allowed "females" to write essays, but they were read by a male member of the faculty.

Referring to world conditions, Miss Woolley said the distinctive word of this century ought to be "Inter"—race, class, nation.

"Unless we apply it, civilization is doomed," she said. "It means understanding, sympathy, cooperation. Sir Philip Gibbs told me the next war would be suicide of white civilization. We women can help. We love to construct, to build up. We are very personal, and that is what is needed—it leads to sympathy. We think not of labor but of laborers, not of foreign races, but of human beings. There is idealism in our sex."

926 Graduates in 50 Years

The third speaker was Margaret Katherine Stack, director of public health nursing, state department of health. She reviewed the history of the Connecticut School of Nursing. The first was in Boston (1863) and Bellevue, although chartered later than New Haven, got into action second. The New Haven school was third in this country.

The school began with four pupils. The first manual for nurses was published by the school. The course was originally eighteen months, now it is three years. Nurses got $15 per month wages. During the fifty years 926 have been graduated.

MISS GOODRICH MADE DEAN OF YALE SCHOOL OF NURSING

Miss Annie W. Goodrich, one of the outstanding figures in nurse education in America, and a member of the National Committee on Nursing Service, American Red Cross, has been chosen as dean of the Yale School of Nursing.

Miss Goodrich is a graduate of the New York Hospital. She later served as superintendent of nurses at Post-Graduate, St. Luke's, New York, and Bellevue hospitals in New York City, and in 1910 became inspector of hospital schools of nursing for the New York State Department of Education.

In addition to her work of school and hospital administration, she has been assistant professor, department of nursing and health, Columbia University, for some years, this service being interrupted only for the time she took in which to complete the organization of the Army School of Nursing during the war, and to serve as its dean during 1918-1919. Since 1917, Miss Goodrich has directed the Nursing Service of Henry Street Settlement.

The School of Nursing at Yale will be developed upon the following plan: the students' instruction and experience will be placed upon an educational basis; the period of education will be shortened, and the course will include experience in public health and community work as well as in hospital service.

CORRECTION OF ERROR MADE IN THE JUNE ISSUE

On page 591 of the June issue appeared the picture of Miss Dora Thompson, a member of the Army Nurses' Corps since 1902, upon whom has been conferred the relative rank of captain. An error was made in spelling her name and in designating the positions she has held. In December 1919, Miss Thompson was appointed assistant superintendent of the Army Nurses' Training Corps and was assigned to duty in the charge of the nursing service in the Philippine Department. Upon her transfer to the Letterman General Hospital, Presidio, San Francisco, in December, 1922, Miss Thompson retained her rank as captain and assistant superintendent of the corps.

FORMER HEAD OF IOWA NURSES DIES

Announcement has been received of the death of Miss Mary C. Haarer, former superintendent of the nurses' training school of the State University of Iowa, which occurred on June 11.

Miss Haarer was formerly president of the Iowa State Nurses' Association for four years and served on the committees of the National Association of Nurses.

ATTENTION CENTERED ON TRAINING OF HOSPITAL EXECUTIVE

One of the resolutions adopted by the board of trustees of the American Hospital Association at the meeting June 4, recommended the thorough study of the report on the training of hospital executives of the committee appointed by the Rockefeller Foundation.

The board also authorized the president to appoint a special committee to further develop opinion, ways and means, and a definite practical plan for the making of a beginning in the systematic training of the hospital executive. The committee is charged to make a report to the trustees when it is deemed desirable.

HEALTH TALKS BROADCASTED

During the spring months, the Henry Phipps Institute carried out a program of weekly health talks broadcasted by radio from Philadelphia. The talks were limited to ten minutes and covered such subjects as "How to Keep from Getting Pneumonia," "How to Avoid Kidney Trouble," "If I Have Tuberculosis, How Shall I Prevent Others from Getting It?" Fourteen of such talks have been multigraphed and a limited number of copies can be obtained at the Henry Phipps Institute, 7th and Lombard streets, Philadelphia.

RESERVE HOSPITAL AUTHORIZED

The organization of a general hospital to be known as "General Hospital No. 28," Christian Church Hospital Unit, Kansas City, Mo., has been authorized by Surgeon General M. W. Ireland of the U. S. War Department.

MISSOURI'S STAND ON EDUCATIONAL REQUIREMENT FOR NURSES

THE October issue of a publication entitled "Caveat," published in St. Louis, Mo., which aims to present "impartially both sides of proposed measures and public questions" contains statements by Helen Wood, R.N., director, Washington University Training School for Practical Nurses Association.

The contrast between these two statements is so great that one is proud of being associated with Helen Wood and the cause she represented even though that cause suffered defeat. Everyone who is interested in any phase of public health should read these two statements which give both sides of the case of the Missouri nursing law which was so outstanding that it has been widely quoted as an example and inspiration to other states. A brief newspaper account of the defeat of the Missouri nursing law reads as follows:

No Educational Requirements for Nurses

"The four-year high school educational requirement for graduate nurses, sought in bills sponsored by hospitals and graduate nurses of Kansas City and St. Louis, was killed in the senate.

"The senate voted to endorse a bill limiting the required elementary education of nurses to one year in high school, beginning with 1925. The bill establishes no educational requirement for practical nurses and abolishes the nurses' educational directory."—Kansas City Times.

There is an increasing number of people who are coming to recognize that the main source of supply for student nurses is the young women of any given community in which a school of nursing is located. Every successful effort to standardize hospitals and schools of nursing lessens the probability that any one school will attract applicants from a distance, and increases the necessity for bringing before the young women in every community the opportunities in the field of nursing.

If this be true, our next step is to question where we will find the largest number of these young women. Just here, a study of the census returns regarding school attendance is most illuminating. These figures show that during the last decade there has been a steady and decided increase in the number of students completing the fourth year of high school, and the number of girls far outstrips the number of boys. This is true even in Missouri, so that aside from any educational ideals, it would seem the part of wisdom to plan a professional program of study that would work in harmony with, and not against, the trend of the times.

It is well-known that large sums of money plus tremendous effort are put into the campaign to keep boys and girls in the high school until the end of the fourth year. Only those familiar with educational policies know how many changes and adjustments have been made in the high school curriculum in order to hold the interest of the students and not allow them to drift away from school earlier than can possibly be avoided.

The following statement from Miss Woods' paper shows that the law had been framed with this in mind.

High School Education Required

"Under the old law, an accredited school need require only a common school education as an entrance requirement. Because of the greater responsibility placed upon nurses today it was felt that one holding a license to practice as a nurse in this state should present higher educational qualifications than she could acquire in a common school alone. In order that an increased requirement might be gradual, the new law stipulates that all nurses coming up for examination for a license after July 1, 1925, shall have had at least one year of high school education or its equivalent. And each year thereafter the requirement shall be increased by one year until, in 1928, all nurses coming up for examination shall have had the equivalent of a full high school course."

If it is true that the high schools are our main source of supply for student nurses, and if it is true that the high school officials are making great efforts to hold the students until the end of the fourth year, is it not evident that this law was really an attempt to work with and not against the educational policy of the country?

In a recent article, "Reaching the Prospective Nurse,"* I find the following:

"First of all, let me say that the 'open sesame' to halls of learning is emphasis on the fact that you intend to stress high school education as the minimum foundation for any career. Some hospital representatives have made the mistake of suggesting a school of nursing as an alternative to continuing in high school. School authorities do not approve of that approach. One principal stated frankly that letters making a plea for vocational training after one or two years of high school were thrown into the waste basket. Another said, 'Why should we admit vocational speakers to our schools to call away our students, when we often have to fight tooth and nail to keep them here?' Urging high school education always wins the cooperation of the school authorities."

Educational Requirement Annulled

These statements seem to support the previous argument and prompt a feeling of regret that in a state usually classed as progressive there is not enough of the pioneer spirit which we usually credit to western or semi-western states, to prompt an honest effort to work with the law rather than to repeal it. To pioneer in any field is a great adventure but it requires courage and willingness to withstand attacks. The pity of it is that the people of Missouri did not appreciate the glory and privilege that was theirs and allowed themselves to be robbed of their distinctive position and unique opportunity.

But if one looks for "the silver lining" of even such a black cloud, one finds that in other states the trend of opinion is somewhat different from what it is in Missouri. About one and one-half years ago the problems of nursing education came up for a good deal of discussion in several states. As a result of these discussions, several medical associations appointed committees to study these problems. Some of these committees have recently published their reports, and after reading them one realizes that the members have found that there are some real problems involved, and the solution is none too easy to find. By far the most outstanding report, it has been our good fortune to read, is published in the May number of the Ohio State

*By Edith Hurley, M.A., R.N., American Journal of Nursing, May, 1923.

Medical Journal, and is signed by the members of the committee consisting of Drs. Charles S. Hamilton, J. P. Baker, John Phillips, and Don K. Martin. Every word of the report is worthy of careful reading, and in support of this statement I submit the following:

"In considering the requirements for entrance into training schools for nurses, according to the biennial survey made by the United States Bureau of Education, there were in 1921 approximately 1,800 schools and a total number of 50,000 students, graduating approximately 15,000 nurses. The eighth grade only was required for admission in twelve per cent of these schools, a full high school education in twenty-eight per cent. Ohio requires but one year of high school work for admission to a registered school. Your committee does not believe that any attempt should be made to lower this standard. On the other hand, an attempt should be made to gradually increase the standard to a full high school education. No girl should enter a training school before she is eighteen years of age, and, with average ability, she should have completed her high school course by that time. There is no room for argument against the statement that in acute illnesses such as pneumonia, typhoid, or scarlet fever, the safety of the patient and the interests of the family and of the community require that the nurse should have the best training that it is possible to give her. She cannot get the best training unless she has sufficient preliminary education to understand it. No problem has ever been solved by substituting ignorance for skill. The medical profession therefore should join with the nursing profession in seeing that the standard of preliminary education should be gradually changed so that all of the training schools would require a high school education from applicants for admission. This change may take time so as not to work too great a hardship to many of the smaller schools, but the tendency should be in that direction."

WRUNGS IN THE LADDER OF NURSING*

Several weeks ago I heard a good sermon from the text—"Watchman, what of the night?" There is something persistent about this text. The words repeat over and over: "What of the night"? "The watchman said: The morning cometh and also the night."

The preacher's thoughts reached backward hundreds of years B. C., when there was a Kingdom of Judah and Babylon, a great city, was in danger. Even then human nature needed a watch in the night.

To the trained nurse, a watch in the night comes pretty near home. The safety of a great city may not depend upon her fidelity to duty, but the life of some one very dear to others often does depend upon her eyes and ears and intelligent devotion.

The voice of another night watch comes to memory calling: "The lights are burning bright, sir, and all is well." It was the voice of a night watch on an ocean steamer. The good ship was being pounded by head winds and strong waves of the Atlantic, but she was homeward bound; the lights were kept burning by faithful hands and all was well.

Another well known preacher told a story in the "Ladies Home Journal" June under the caption—"Minding One's Own Business" which is worth reading. In this Journal story, Dwight L. Moody is quoted as saying: "I have had more trouble with myself than with any other man I have ever met." To show how intelligence may differ from education, Dr. Fosdick includes in his Journal story this other story: "A young Polish girl in a New York school, asking, in common with her class, to write an essay on the difference between an educated and an intelligent man, summed up the matter as follows: "An educated man gets his thinks from some one else, but an intelligent man works his own thinks."

A good education is a real asset. There is a science of nursing which is built upon other sciences;—but the science of nursing needs the human element of courage, sympathy, tact and loyalty. For the highest success, the human element is indispensable.

Another good story was told recently by an able minister to the young people of his church—and to others. The story was about "The Great Stone Face" that looked down from a mountain upon the people of a country village. By actual measurements "The Great Stone Face's" eyes were 100 feet apart; but, looked at from a distance, the features were symmetrical. Strength and nobility of character were plainly written there. A village legend told that to this village, some day, would come a man of flesh and blood possessing the noble qualities reflected from the countenance of "The Great Stone Face." This legend so kindled the imagination of a certain youth of the village, that he worshipped daily by looking long at "The Great Stone Face." Years passed but no great man came who remotely resembled "The Great Stone Face." One day the young man, Ernest, stood on an outdoor platform to act his part in a village pageant. A profile artist present glancing from the young man to "The Great Stone Face" in the distance, cried out: "Look! see the resemblance! The countenance of Ernest is like the countenance of 'The Great Stone Face.'" It was a good story told to illustrate an every day truth. The boy Ernest had idealized "The Great Stone Face"; he grew to look like his ideal.

Thousands of nurses have idealized Florence Nightingale. It would be hard to over-estimate the influence on character of such an ideal. If our life work makes us think less of self and more of being helpful to others, this will count in character and our life work will be worth while.

If you find grateful life-long friends at the hard places of your profession, those hard places and long night watches may be well worth while.

*Brief address to the graduating class of the City Hospital Training School for Nurses, Worcester, Mass., given by Dr. Charles A. Drew, superintendent, June 15, 1923.

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES,
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APPLICATION OF THE LAWS OF METABOLISM TO THE CONSTRUCTION OF DIABETIC DIETS*

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IF THE dietetic treatment of diabetes mellitus is to be anything other than empiric, if we hope to control in a rational manner the abnormalities resulting from the disturbance in the nutritive processes due to the disease, it is apparent that the diets must be constructed with a proper regard for the principles of metabolism that have been tabulated by the investigators of the biochemical behavior of the organism.

While most of the facts upon which these fundamental principles are based have long been known to the physiologists, their application to the therapeutic problem has, in many instances, been very recent. In particular, three such principles, simple, but of prime importance, have greatly influenced the treatment of diabetes during the past few years. It is the purpose of this communication to examine into these principles themselves and to show how they may be interpreted in the construction of the diabetic diet.

The Actual Metabolic Mixture

The first of these principles may be stated as follows: *The actual material metabolized in the body is not necessarily identical in proportions or quantity to the food ingested*, even though the latter is completely digested and absorbed.

An excess of food, above the amount required by the subject, will, of course, be stored, rather than burned. In this case it is apparent that the food fed is not in any way the true measure of the metabolism of the three food stuffs. Such a situation is of some importance in the interpretation of experimental results. Furthermore, the more severe grades of diabetes, which are the only ones that offer important difficulties to treatment, make the administration of excess food incompatible with an aglycosuric state and the proper balance between the foodstuffs in the diet. In the milder grades, as will be pointed out later, such an excess is undesirable, because of the resulting stimulation of the rate of metabolism, and because of the accompanying gain in weight.

Of extreme importance, however, is the reverse of this situation, in which the food fed is not sufficient to supply the caloric requirement of the patient. Under such circumstances the patient derives the difference between his caloric intake and output from his body stores and from the tissues themselves. The living organism differs from the engine, to which it is often compared, in that, if sufficient fuel is not available from outside sources, it burns itself.

Fasting Takes Fuel from Tissues

The extreme example of this is found in the fasting individual. Such a subject continues to require fuel for heat and other energy, and derives this from his own tissues. Benedict has analyzed the nature and amounts of tissues used for this purpose. On the third day of their fast, his subjects burned an average of the following amounts of the foodstuffs per kilogram of body weight: protein 1.28 grams; fat, 2.54 grams; and carbohydrate, 0.36 grams. A man weighing 60 kilograms, may thus be expected to burn 77 grams protein, 152 grams fat, 22 grams carbohydrate and 1,820 calories. These were, of course, derived from the body itself. The relatively large amount of fat, supplying nearly 80% of the total calories, should be noted.

In a general way, the fasting diabetic uses his body tissues in the same manner. There will be some variation in the actual proportions of the material burned from patient to patient because of differences in capacity for utilizing carbohydrate and differences in the ratios of protein to fat in the body. If body fat is available the patient will derive most of his calories from its combustion. A diabetic who has consumed most of his fat stores is thrown back on his body protein for his important source of energy.

Just as there is some variation in the actual proportions of protein, fat and carbohydrate that will be taken from the body tissues for fuel for the fasting diabetic, so also there is some variation in the absolute amounts, determined by such factors as the basal metabolic rate, the amount of exercise allowed the patient, the amount of heat that must be produced to keep the body temperature normal, and so forth. The essential point to be emphasized, however, is that there is no cessation of the process of oxidation in the body even though all food be withheld. While the exact character and rate of catabolism will vary from time to time and from patient to patient, there remains at all times a continuous combustion of fuel derived from the tissues of the body.

*From Department of Internal Medicine, Medical School, University of Michigan.

On the other hand, it can be shown experimentally that there is no important change in the metabolism of the fasting organism when the endogenous source of energy is replaced by food. Voit has shown that a well-nourished dog which during starvation burned 96 grams of body fat, burned 97 grams when fed 100 grams of fat. That is, the same amounts of fat were burned, whether they came from his body or his food. Du Bois and Richardson have demonstrated that there is no essential difference between the metabolism of a fasting diabetic and the same patient when fed quantities of protein, fat, and carbohydrate corresponding to those burned during his fast day.

Fasting has been advocated in the treatment of diabetes for the purpose of decreasing the work of that part of the pancreas that has to do with the intermediary metabolism of the foodstuffs. It is apparent that this "pancreatic rest" can never approximate absolute rest. The endogenous metabolism continues, with the organism consuming its own fats and proteins. On the other hand, the effect of replacing part of this with food is negligible. It is not conceivable that the pancreas functions in any different manner in the metabolism of food material derived from endogenous than from exogenous sources. The fasting of a diabetic, with its enormous destruction of important body tissues, the extreme prostration that may occur and the serious and even fatal inanition or acidosis that is frequently encountered, is manifestly illogical if the only result to be hoped for is rest of the pancreas.

A similar argument shows that the diabetic patient whose allowance of food is greatly below that required to maintain caloric balance must supply the difference between his fuel intake and his energy output by drawing on his body tissues. As the proportion between fat and protein in his body decreases, the relative amount of energy furnished by body protein increases, just as is observed in complete fasting. Quantitative studies of such a patient will show that the nitrogen in his excreta is materially greater than that in his food, and that the amount of this deficiency is dependent to a large extent upon the number of calories allowed him in his food.

Great Loss of Tissue in Fasting

The loss of body tissue thus incurred cannot be negligible. Benedict's healthy subject, who fasted thirty-one days lost a total of 277 grams of nitrogen, representing an average destruction of body protein of 60 grams daily. When some food is fed, of course, this loss is not so great. But the accumulated extraction of protein from the tissues when the daily negative nitrogen balance is only 2 or 3 grams will amount to as much as 3 kg. in six months. This may be expected to happen in the diabetic whose food allowance is below his caloric requirement. Since protein is not stored in the body in depots, as is the case with fat and carbohydrate (glycogen), the resulting destruction of important organs is enormous, and eventually leads to death from inanition. It is apparent that if a diet that contains sufficient calories to prevent severe undernutrition may be used such a diet must be more successful than this nitrogen loss in allowing the patient to approach a metabolic state approximating the normal.

Not only does severe undernutrition permit the patient to suffer this loss of important tissue, but it also fails to accomplish its purpose, namely, the reduction of the intermediary metabolism to the level represented by the food allowed. The situation is similar to that of the fasting individual. The patient continues to require energy, and such as is not furnished by the food is furnished by the tissues. While a reduction of the metabolic rate occurs, as will appear from later discussion, the relief of the pancreas is not represented by the difference between the amount of food prescribed and the amount previously allowed.

In constructing a diabetic diet, we must be on the alert so that we are not misled by an assumption that the food taken in represents the actual material metabolized. Many of the misconceptions that have controlled the treatment of diabetes in the past have been due to lack of regard for the *actual metabolism* as distinct from ingested food.

An excellent example of this is found in the very important investigations into the conditions that may be expected to cause acetonuria.

Fasting in the Diabetic and Normal

When fasting was introduced into the treatment of diabetes, it seemed impossible to reconcile the fact that whereas fasting in the normal resulted in the appearance of large amounts of "acetone bodies" in the urine, the same procedure in the diabetic was often followed by a rapid decrease in the ketonuria. To explain this, it was necessary to assume some specific peculiarity of the diabetic organism in regard to ketogenesis. It seemed equally strange that the normal subject on a second fast had much less ketosis than on his first fast; this was explained by the belief that the organism, in becoming accustomed to fasting, developed some sort of compensatory mechanism for accommodating itself to its abnormal situation. On the other hand, it was noted that some diabetics responded to fasting by showing an increasing and even fatal acidosis. It is significant that Wilder believed that the obese diabetics did worse on the fasting regime than the lean patients. It is also true that some patients would go into coma on diets on which others did very well. All these observations made it seem impossible to establish a fat: carbohydrate ratio that might be expected to prevent ketosis.

Yet an examination into the actual metabolism of these patients shows that the conditions for the development of ketosis were the same in all cases. The different reaction of two individuals to a fast is not due to peculiarities of their metabolic processes, but to differences in the proportions of the food stuffs actually burned. The wide variations in the apparent ratio of fat to carbohydrate that will cause ketosis in different individuals is due to the differences in kind of body material that is requisitioned to supply the difference in calories between the requirement of the organism and the content of the diet. No experimental study of the ketogenic threshold can be accepted that does not include determination of the material actually utilized by the subject.

Since this subject of acidosis is of great importance to the diabetic, it is worth studying from another angle. It will be remembered that the fasting subject burns a relatively large amount of fat for his endogenous supply of energy. Benedict's fasting man "L" burned 152 grams fat on the second day of his fast, and Cetti burned 137 grams on the same day, representing in each case about three-fourths of the total calories for that day. It has also been pointed out that substitution of food fat for this body fat had no important effect on the metabolism.

A fasting diabetic patient then, who is not too greatly emaciated, may be expected to burn over 100 grams of fat daily. Feeding him the same amount of fat would leave his metabolism in essentially the same state as before. If such a patient is allowed to continue to draw on his fat stores, he continues to decrease the ratio of fat to protein in his body, and to increase correspondingly the amount of tissue protein used for the production of energy. From these facts, fasting, or almost complete fast-

ing, for purposes of desugarization seems neither necessary nor rational. Furthermore, building up the diet first with carbohydrate, then with protein with a careful avoidance of fat, as has been widely done in the recent past, may be allowed if one assumes that ingested fat increases the catabolism of fat. Such an assumption is untenable, however, as it ignores the endogenous sources of fat. The smaller the allowance of the fat in the diet, the more is derived from the tissues, and vice versa.

We have regularly used for desugarization a diet supplying from 900 to 1,000 calories. In some 200 consecutive cases of diabetes mellitus we have not failed to attain the aglycosuric state, and in no case has the diet resulted in important acidosis; on the contrary, every patient with acidosis short of coma has recovered from the acidosis, in spite of the fact that this diet allowed 80 to 90 grams or three-fourths of its total calories in the form of fat. Three years ago such a diet would have been considered extremely dangerous. The reason that these fears were not realized may in part be found in the fact that the diet substitutes food material for material subtracted from the body tissue. The difference in metabolism between the fasting individual and the individual receiving 1,000 calories daily has been greatly overestimated by those who use fasting for purposes of desugarization.

Glucose Content in Metabolism

The second principle that has importantly affected the treatment of diabetes is that *certain of the products of the intermediary metabolism of the foodstuffs are of more importance than the foodstuffs themselves.* The application of this principle to dietetic therapy in this disease has been gradual and over a period of many years, but it has recently assumed a great and increasing importance.

The primary defect of the diabetic organism is its inability to utilize glucose, when the latter is supplied in excess of the limit that can be burned by the individual patient. This limit may be anything from zero to a level just below that of the normal subject. The other abnormalities in the diabetic state, such as the increased protein metabolism and acidosis, can be shown to be secondary to this inability to use glucose. The object of dietetic therapy is two fold: the relief of symptoms, including the prevention of complications and death; and the relief of strain of the weakened glucose-burning function, in the hope of improving that function, or at least of preventing its further damage. These things are accomplished by keeping the quantity of glucose that is allowed the patient from all sources well below the limit of his ability to utilize it, and at the same time maintaining the metabolizing material in such proportions that acidosis does not result.

In order to keep the glucose that is available to the organism below his limit of utilization, it is necessary to understand the sources from which it may be derived. This entails a consideration of each of the food stuffs, of both exogenous and endogenous origin.

The only form in which carbohydrate is available to the body in any significant amount is as glucose. Therefore, for practical purposes, we may say that all carbohydrate assimilated is converted into glucose, either in the process of digestion or in the intermediary metabolism. Since the normal subject eats 300 or more grams of carbohydrate daily, this constitutes his greatest source of glucose. It has then been obvious for many years that the control of diabetes entailed a restriction of the carbohydrate content of the food.

It was soon found that the restriction of carbohydrate alone was not sufficient to control the glycosuria in any but the milder cases of diabetes. It was also noted that the feeding of protein in a severe case of diabetes with glycosuria caused an increase in the glycosuria, and in some patients who were sugar free, ingested protein caused a return of the glycosuric state. This same increase is noted in feeding protein to phlorizinized dogs. Lusk showed that for every extra gram of nitrogen in the urine there was 3.65 grams of extra glucose. In the fasting phlorizinized dog a similar ratio holds for the nitrogen and glucose derived from tissue protein, as it has been seen in human diabetes. Such a ratio implies that fifty-eight per cent of the protein may be converted into glucose, 100 grams of protein yields as much glucose as 58 grams of granulated sugar.

Importance of Restricting Protein

Failure to realize the importance of restricting protein has been responsible for many of the unsatisfactory results in the treatment of diabetes. The von Noorden type of diet, for instance, that was popular until a few years ago, contained a large amount of protein; one that was used widely for purposes of desugarization allowed the patient 200 grams protein with 165 grams fat and 15 grams carbohydrate. One hundred and sixteen grams of glucose can be derived from the protein alone, and it cannot be expected that such a diet will control the glycosuria in the more severe cases. In spite of the fact that the large percentage of glucose that may be derived from protein seems well known, it is nevertheless true that the majority of the patients coming to the university hospital at the present time have been treated by high protein diets. Protein-fat diets as recommended by Mosenthal are still in common use.

The first step in the catabolism of fat consists in its saponification into glycerol and the higher fatty acids. The feeding of glycerol to a phlorizinized dog results in its entire excretion as glucose. One can calculate, from the amount of glycerol that can be liberated from fat, that roughly 10 per cent of the weight of the fat is convertible into glucose in the body. On the other hand, we have no evidence that fatty acids are ever converted into glucose in the human. Fat, then, furnishes to the body a maximum of energy and a minimum of glucose.

It has long been the custom to measure the severity of a case of diabetes by the "carbohydrate tolerance" of the patient. This was usually meant to indicate the amount of carbohydrate, fed as such, that could be given the patient without the appearance of glycosuria, or sometimes, of hyperglycemia. Frequently, no account is taken of the other constituents of the diet, and the glucose that might be derived from them. These sources are insufficiently stressed. Yet it is apparent that the tolerance of a patient for carbohydrate fed as such, will depend in part upon the amount of glucose thrown into the metabolic mixture from other sources, especially from protein. A patient who will tolerate 100 grams carbohydrate daily when 50 grams protein are fed with it, can be expected to burn only a little more than 40 grams if it is accompanied by 150 grams of protein.

In the construction of the diabetic diet, then, it is essential that we think in terms of the glucose that may be derived from the whole diet, rather than that from carbohydrate alone. Since all of the carbohydrate, over half the protein and not more than one tenth of the fat are converted into glucose in the intermediary metabolism of the foodstuffs, it becomes clear that the diet the severe diabetic may be allowed, will contain a reasonably large number of calories without the occurence of glycosuria only when the carbohydrate and protein are limited, and

fat is allowed to predominate. The gain in calories becomes still more striking when we remember that a gram of fat supplies more than twice as much heat as a gram of protein or carbohydrate. The following diets, so constituted as to allow the patient the same number of calories, will serve as examples of the varying glucose content of different types of regime that have been suggested for the control of the glycosuria.

Protein	Fat	Carbohydrate	Calories	Glucose Equivalent
180	138	10	2000	128.4
90	113	130	2000	193.6
50	187	30	2000	78.1

Such a calculation of the total glucose-forming ability of the food does not, however, account for all the glucose that may be thrown into the metabolic mixture. The endogenous sources of glucose must also be reckoned into the total. As has been pointed out, a patient whose food does not furnish a large enough number of calories to satisfy the energy requirement of the organism, is thrown back on his body tissues for fuel. The combustion of these tissues results in the same formation of glucose that might be expected from corresponding quantities of the ingested foodstuffs.

Of the foodstuffs thus derived from the tissues, the most important is protein. As treatment is initiated, there is, of course, a large excess of glucose in the body, as evidenced by the high percentage of sugar in the blood; this, however, is a definite amount, and is added to only from the food or from body fat and protein. As the diabetic state is brought under control, this glucose is burned or excreted, and if not increased by additions from other sources, will eventually reach a normal level. The metabolism of endogenous fat, is only a very minor source of glucose because of the relatively small proportion of it that is converted into glucose-forming radicals. Body protein, on the other hand, no less than food protein, may be converted into glucose to the extent of fifty-eight per cent of its weight.

The amount of sugar thus thrown into the mixture may be far from negligible. For instance, during the first five days of Succi's fast, his urine contained an average of 12 grams nitrogen daily, representing a destruction of 75 grams of body protein. The glucose that was derived from this was nearly 45 grams, an amount sufficient to be of great importance to the diabetic whose tolerance for carbohydrate is very low. It will be further remembered that the amount of body protein burned during fasting or severe undernutrition is dependent in part on the ratio of protein to fat in the body, so that the very lean diabetic will develop an even greater protein metabolism than the fairly well nourished normal subject.

Loss of Protein—Decrease in Glucose

It follows, then, that a reduction of the rate of protein metabolism will result in the reduction of the amount of glucose imposed on the diabetic patient from this source. For such reduction we are dependent on the protein-sparing qualities of the other food stuffs. If sufficient calories are fed in the form of carbohydrate and fat to satisfy the energy requirement of the organism, the rate of protein metabolism is so low that nitrogen balance may be established on less than two-third grams protein per kilogram of body weight per day. This rule has been established by Hindhede, Chittenden, Sherman and others in reference to normal subjects, and we have demonstrated in our laboratory that it is equally applicable to the diabetic. For a subject weighing 60 kilograms, an allowance of 40 grams protein daily may be expected to replace the protein destroyed in the ordinary wear and tear of life, provided that no protein is used for the primary purpose of producing energy; the latter implies that sufficient non-protein calories be allowed to supply the total energy requirement of the patient.

The protein-sparing qualities of fat and carbohydrate were discovered by some of the earliest students of metabolism, and it is well known that in a mixed diet fat may replace carbohydrate in isodynamic quantities. On the other hand, while it is true that partial replacement of fat by carbohydrate in a low protein diet will not affect the protein metabolism, complete withdrawal of carbohydrate and substitution of fat will not permit the establishment of the rate of protein metabolism at a low level.

Fat alone will not decrease the amount of nitrogen found in the urine of the fasting animal. It is generally believed that fat loses its effectiveness in sparing protein when the carbohydrate calories fall below ten per cent of the total calories. That this figure is high is shown by the fact that we have been able to establish a group of diabetic patients in nitrogen balance on diets that allowed a daily average of two-third grams protein per kilogram of body weight, carbohydrate to the extent of only four per cent of the total calories and enough fat to satisfy the total requirement. Nevertheless, it is true and important to remember that the rate of protein metabolism is low only when some carbohydrate is allowed with the fat.

It is apparent, then, that because of the glycogenic qualities of protein, there is an advantage in maintaining the nitrogenous metabolism of the diabetic at a minimum. A second advantage, as will be pointed out later, is found in the diminution of the stimulation of the metabolic rate that occurs with the limitation of the combustion of protein.

On the other hand there is no advantage in feeding an excess of protein. Fat and carbohydrate are entirely satisfactory as sources of energy. Furthermore, protein beyond the requirement of the organism is except under very unusual circumstances, excreted rather than stored. Finally, it must be remembered that protein is not an unimportant source of ketogenic molecules and, if part of the glucose in a high protein diet is excreted, this is a factor in the production of acdiosis that can not be ignored. It must be concluded from all these facts that sharp limitation of protein is clearly indicated in the dietetic treatment of diabetes.

Reduction of Metabolic Rate

During the past few years, there has been an increasingly strong conviction among students of diabetes that *reduction of the rate of metabolism is beneficial to the diabetic patient.* This is the third principle for discussion today. There are several reasons for prophesying improvement from such reduction of the metabolic rate. In the first place, it is apparent that the total amount of glucose that is thrown into the metabolic mixture during a given period of time will depend upon the amount of material catabolized as well as upon the nature of those materials. We have seen that all three of the foodstuffs are capable of producing glucose; if the proportions of each remain the same, a reduction of the total catabolism will inevitably cause a reduction in the amount of glucose forced on the diabetic organism. For the severe diabetic such a reduction may be very important in keeping the glucose from all sources within his ability to utilize it.

A similar argument applies to ketogenesis. The ability of the diabetic organism to burn antiketogenic molecules is limited. As the amount of food and tissues catabolized

increases, on the other hand, there is a steadily increasing production of ketogenic molecules, and if the rate of glucose utilization be at a low level, there must be an increasing ketosis. Recently another reason has been suggested by the work of Wilder, Boothby, and Beeler in that there seems to be a definite depression in the ability of the organism to burn glucose as the metabolic rate rises; their patient, who could utilize 30 grams glucose with a basal metabolic rate of twenty per cent lost entirely her ability to utilize glucose when the rate rose to four per cent.

In a consideration of the procedures by which we may expect to decrease the total twenty-four hour metabolism of an individual, it is convenient to discuss his basal metabolism and the excess over this minimum that is due to the stimulation of food, and of exercise. The former is the minimum rate of calory production in an individual during the 24 hours and is measured after rest in the post-absorptive period, usually in the morning before breakfast. For normal persons under ordinary conditions of life, this is a definite rate which shows a little variation from person to person and can be predicted to within ten per cent. The latter is subject to enormous variations due to differences in type and quantities of food and to differences in work.

Since the elevation in the metabolic over the basal rate of the diabetic is dependent upon food and exercise, it is by controlling these that we may keep the quantity of material burned in the twenty-four hours at a minimum. Keeping the patient at rest will save him many calories. The influence of food, however, must not be ignored. The stimulation of the metabolic rate by food is chiefly due to the "specific dynamic action" of protein. Very little rise occurs when fat or carbohydrate alone or together is fed.

A very considerable rise, however, occurs when protein is fed; this rise is in proportion to the amount fed, and is generally considered to be about thirty-five per cent of the calories so provided. A diet, then, containing the minimum of protein that is compatible with the maintenance of nitrogen balance, will produce a smaller increase over basal on the metabolic rate than one rich in protein, and may, therefore, be expected to be the more effective in controlling the diabetic state.

Rate Subject to Dietetic Control

The basal rate of metabolism is likewise subject to dietetic control. In this two factors seem to be important —the amount and character of the food. Undernutrition was shown by Benedict to have a very considerable and rapid depressing effect on the basal rates of a group of normal young men. An identical effect has been reported a number of times in diabetics, notably by Allen and DuBois, and by Wilder, Boothby and Beeler. We have seen among our patients a fall from normal to twenty per cent or thirty per cent in the course of ten days of feeding of diets allowing only 1,000 calories daily. Such an enormous reduction in rate, with the resulting decrease in the quantities of glucose and of ketogenic substances thrown into the metabolic mixture cannot but improve the condition of the severe diabetic, and especially of the diabetic showing an acidosis.

The principle, elaborated by Allen and by Joslin, that overfeeding is detrimental to the diabetic and that underfeeding improves his condition, is supported by a mass of clinical and experimental evidence that must be accepted. While there may be ground for discussion as to the degree of limitation of caloric intake that is most efficacious, we must all be convinced that underfeeding in some degree is necessary for the successful desugarization of the more severe grades of diabetic patients.

A more recent suggestion has been made that the character as well as the quantity of the food of the previous few days has an influence on the basal rate. In the patient of Wilder, Boothby and Beeler, referred to above, a diet relatively poor in protein established the basal metabolic rate at a level of fourteen per cent below normal, while four days of an isocaloric high protein diet, with essentially the same available glycogenic and ketogenic possibilties brought about an increase in rate of ten per cent, with a rising glycosuria, an acidosis increasing to the verge of coma, and a total loss of ability to utilize glucose. In this experiment, these investigators believe that they have demonstrated a very important reason for the limitation of protein in the diabetic diet to the amount necessary for the establishment of nitrogen balance at the lowest possible level.

It is possible that the frequent clinical observation showing that a diabetic does better when he is lean than when he is fat may be explained on this same difference in quantity of metabolism. A diabetic may have a return of glycosuria without change in diet associated with large gains in weight, while an obese diabetic may tolerate an essentially normal diet if he is reduced. Since the heat elimination of an individual is proportonal to his body area, which is in turn dependant in part on his weight, an increase in the mass of body tissue is followed by an increase in his production of calories.

Furthermore, a subject who is gaining weight is being fed beyond his requirement and the benefit of reduction of his basal metabolic rate by slight underfeeding is lost. These two factors, increase in body surface and increase in weight, operating together, may account for part of the apparent loss of tolerance associated with gains in weight.

If one accepts these premises in the construction of the diabetic diet, it is apparent that (1) the protein metabolism must be brought to a minimum, because of the glycogenic function of this foodstuff and because of its stimulating effect on the rate of metabolism; (2) the carbohydrate content must be low to prevent glycosuria; (3) if the diet is to contain enough calories to permit of ordinary activity on the part of the severe diabetic, these calories must be derived chiefly from fat; (4) overfeeding with the resulting increase in metabolism and gains in weight are to be avoided.

We have demonstrated in our clinic that such a low protein, low carbohydrate, high fat diet, with moderate restriction of total calories, is not only rational in theory, but is effective in practice. By the use of such a diet (1), we have not failed to attain the aglycosuric state in any one of our 200 consecutive and unselected diabetic patients; (2), in no case did important acidosis occur, and in all cases in which acidosis, short of coma, was presented at the initiation of treatment, this acidosis was promptly relieved; (3), nitrogen balance was established on two-third grams protein per kilogram body weight per day; (4), a comparison of our statistics with those of physicians using severe undernutrition shows that the duration of life is not decreased; (5), the patients have been able to lead active lives, usually returning to their former occupations, becoming useful citizens instead of chronic invalids. We feel that such success in practice with diets constructed in accordance with metabolic theory justifies us in our belief that the adoption of this general principle will be of benefit to at least the great majority of diabetics.

For dietetic news notes see page 110.—EDITOR.

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by FRANK E. CHAPMAN, Director
Mt. Sinai Hospital, Cleveland, Ohio

A PRACTICAL PLAN FOR CONSERVATION OF ARTICLES LAUNDERED IN THE HOSPITAL

BY ROBERT J. WILSON, M.D., DIRECTOR, BUREAU OF HOSPITALS, NEW YORK CITY.

THIS plan for the conservation of linen, wearing apparel and other articles is based entirely upon the proposition that the laundry is a part of the storehouse and under the control of the accounting division of the hospital, and that the hospital keeps strict account of its floating equipment by monthly inventory. In theory, any equipment of any kind not being used in the wards or other administrative branches of the hospital automatically returns to stores, until requisitioned. Therefore, the moment laundry leaves the wards and a receipt has been given, it is returned to stores and, during its whole process through the laundry including transportation, it is in active stores. It is assumed that in everything pertaining to stores, a proper system of accounting is kept and that these articles are only issued on approved requisitions and that when delivered, receipts are given for them.

System Not More Burdensome

At first consideration, it might be thought that this proposition entails a great deal of additional and burdensome bookkeeping. This is not the case as it does not require any more bookkeeping than is represented by the duplicate laundry lists that accompany the wash and represent the inventory of stores, the requisition for the replacement of the articles in the wash by new stores, and the receipt for the articles received at the time of delivery at the storehouse in the laundry.

This system insures a prompt delivery because there is a replacement, in each instance, directly from stores, and the only time lost in the process is that necessary to verify the articles on the laundry list. The storekeeper's counts only are accepted as correct. When there is either shortage or extra articles in deliveries at the laundry, replacements are made on actual deliveries, and the corrected laundry list is filed in the storehouse (laundry).

Investigation of losses due to transportation begins at the point of dispersal. If lost enroute to the laundry, the investigation begins in the wards. If from the laundry, it begins in the storehouse.

The greatest objection that has been raised to this procedure is that the laundry must be counted and invoiced (laundry list made out) in the wards and that the checking method at the storehouse (laundry) throws the onus of investigation on the office responsible for the original count. This is not a valid objection, for it is only by strict attention, and accuracy in counting, that the leakage of which so many hospital officers complain, can be stopped.

The Plan as It Works

The practical application of this method is roughly as follows: A hospital ward for adults of ten bed capacity has been empty for some time and is ordered put in commission. The head nurse issues a requisition (ordinary laundry list in duplicate form No. 1) for the necessary bedding, wearing apparel, and toilet necessities to prepare the ward for patients; that is, fifty sheets, forty pil-

Form I. DEPARTMENT OF HEALTH
CITY OF NEW YORK
Hospital Clothes List

Ward No. ... .192...

ARTICLE	No.	ARTICLE	No.
Aprons—White		Pajamas, Coats—Men's	
Colored		Pants—Men's	
Belts		Coats—Children's	
Blankets—Double Bed		Pants—Children's	
Single Bed		Pants, Outside	
Double Crib		Petticoats—Women's	
Single Crib		Children's	
Bibs		Pillow Cases	
Covers—Bureau		Screens	
Table		Sheets—Bed	
Washstand		Crib	
Curtains		Spreads—Bed	
Caps		Crib	
Collars		Stock Collars	
Cuffs		Stockings—Men's	
Diapers		Women's	
Drawers, Muslin—Women's		Children's	
Children's		Sweaters	
Dresses—Women's		Tablecloths—White	
Children's		Colored	
Gowns—Bath		Towels—Hand	
Doctors'		Roller	
Nurses'		Dish	
Visitors'		Glass	
Gray Shirts		Bath	
Handkerchiefs		Underdrawers—Men's	
Jumpers—Men's		Women's	
Napkins		Children's	
Nightgowns—Men's		Undershirts—Men's	
Women's		Women's	
Children's		Children's	
Overalls—Men's		Vests	
		Waists	
		Wrappers	

RECEIVED the above enumerated articles.
(Name) .....
(Official Designation) .....
.....192....

low cases, fifty blankets, twenty spreads, twenty bed pads, twenty pajama suits or night gowns, twenty bath towels, twenty face towels, twenty wash cloths, ten dish towels, and twenty pairs of stockings.

This list is sent to the storehouse (laundry) and, immediately on its receipt, the articles called for on the requisition (laundry list) are taken from the stock room (surplus stock in the laundry) and sent to the ward. The driver of the laundry delivery wagon, upon receiving the packages of laundry from the storekeeper's representative (laundry attendant), gives a receipt form No. 2 for them, and when he delivers them takes a receipt (same form)

Form II.

DELIVERED TO	RECEIVED FROM
.....	.....
.....articles	.....articles .....
.....packages	.....packages .....
.....pounds	.....pounds .....
DELIVERED BY	RECEIVED BY
.....	.....
Date	Date .....

from the person receiving the goods at the ward. The head nurse, upon the receipt of the goods, places them in the stock room (linen closet) of the ward and lists them in the inventory book as stock on hand on date of receipt.

The amount necessary for making beds and clothing patients and providing for their hygienic needs is immediately issued to the nurses in the wards, the remainder is stock to be drawn upon in the interval prior to the next requisition (return of soiled linen to the laundry with proper list).

Every morning soiled linen is collected, counted, placed in bags and sent to the laundry with list form No. 1. Every afternoon replacement is made to the ward of every soiled article received. Whenever it is necessary to send equipment to the ward to care for a greater number of patients or to meet emergencies on account of the character of the service, a separate list approved by the head nurse is sent to the store (laundry) with the explanation that the articles are necessary. Thus they are immediately issued and, when received by the head nurse, are added to the inventory book as stock on hand.

Mislaid Articles Easily Traced

An inventory made at 4 p. m. any day should agree with the amounts shown by the inventory book. The system of receipts makes it easy to trace misplaced articles to the point where they are lost. Incidentally, it will be found that the greatest source of leakage is through substitution of the articles of floating stock for other articles needed but not supplied, such as towels, cleaning cloths, napkins, rugs, floor cloths and the like.

The chief advantage of this method of controlling the linen, bedding, and apparel supply, is that it places the responsibility on a fixed administrative officer (the storekeeper) and removes it from a rotating medical officer (the nurse).

PAINTING THE HOSPITAL

By F. A. FARRAR, Chicago, Ill.

PAINTING plays an important part in the success of the modern hospital. The hospital should be regarded by all as a place of relief and refuge; it should be inviting instead of repellent, homelike rather than institutional, at least in appearance. The color schemes selected should be cheerful, homelike, and as far removed from the conventional as is practicable. Above all, it should be in good taste. The average citizen, however, cannot describe good taste in decoration, but feels it when he comes in contact with it, for the rules in decoration are based on the human physiology and psychology. Any competent master painter or any good paint manufacturer can furnish ample suggestions on this point.

Painting—A Protective Measure

We must take into consideration the materials to be painted. They are usually wood, tin plate, galvanized iron, and concrete or stucco. It pays to paint the latter so as to prevent air cracking, to repel moisture and to relieve ugliness, for while they may be everlasting, such beauty as they may have is certainly not enduring. Moisture and air working into concrete or cement will in time destroy it if it is not given the proper protecting coat.

The proper treatment of all these surfaces varies not only with the materials themselves, but with the conditions. The best initial step, therefore, is to entrust the work to a competent painter and hold him responsible for proper performance. Opinions differ as to the preference in painting materials; many painters hold stubbornly to pure lead and oil, that is, white lead and linseed oil. There also is a decided preference for a combination of zinc and lead, and a moderate percentage of so-called inert pigments. Then, of course, there are the many ready-to-use paints put out by reliable manufacturers. Some painters cling to paints in paste form mixed with oil and the other necessary liquid vehicles "on the job." The ready mixed product, however, comes practically ready for use and, as a rule, is reliable. This latter type of paint is, furthermore, very convenient both as to handling and the selection of colors.

Copper and Sheet Zinc for Roofs

The preferable materials for roofs and gutters, are copper or sheet zinc. These are practically everlasting if properly installed, but sheet zinc costs much less than sheet copper. Tin plate is sheet steel coated thinly with an alloy of tin and lead; galvanized iron is steel coated with zinc. Both, however, require protection because of the steel, which rusts as soon as the moisture reaches it, and moisture always does reach it through these coatings. A tin roof should be painted at once. The new sheets are covered with an invisible film of oil from the manufacturing process which should be removed by washing with benzine, at the same time scraping all rosin from the soldered seams.

Always paint on a warm, dry day and give two coats of paint, the second about one week after the first has been applied, and repaint one coat every two years. Allow galvanized iron to stand unpainted for about six months, then proceed as with tin roofs. When immediate painting is required treat the surface first with a solution of six ounces of copper acetate per gallon of water. This tends to loosen up the surface so that the paint will adhere readily.

Concrete, stucco, cement, and similar materials should

be allowed to stand for some time so that each may become thoroughly dried out. Then in dry weather give four coats of paint at intervals of five days or more. Should you wish to paint with a lesser lapse of time treat the surface before painting with a solution of eight ounces of zinc sulphite to the gallon of water. This converts the uncombined "lime" in the surface to calcium sulphate (gypsum) and precipitates zinc hydroxid therein. In cold weather if water is allowed to get in the cement and freeze, large cracks are apt to result. Also the dampness gets and stays in.

Because of fire hazard, the only wood which should be legally permitted on the exterior of hospitals in any location should be used only for the porch or porches, the cornice, the door and window frames, the sashes and the doors The proper painting of wood depends on the nature of it. The variety is so great that the subject cannot be considered in detail here. However, some simple points can be set down and acquired with profit. The following are a few general considerations.

The success of a painting job depends as much, if not more, on procedure than material. All good paints are good enough if properly handled. The condition of the surface and atmospheric conditions, and the time of painting have also a great deal to do with the success and durability of the job. Moisture has been found to be the chief enemy of oil paint. Therefore, both material to be painted and the atmosphere at the time of painting should be comparatively dry, otherwise the result is likely to be unsatisfactory. Not fewer than three coats of paint should ever be applied to an unpainted wood surface. Two coats will usually suffice if the surface has already been painted, but to get a satisfactory result over old paint all loose or scaling material must first be thoroughly removed. Incidentally, it never pays to hurry a job of painting. It is best to allow sufficient time, three days at least, for drying between coats.

Porch ceilings may be finished in the natural wood, coated with a good exterior varnish, and don't forget that the proper varnish for any such work always costs money, but nothing else is fit for it. It is cheaper to repaint than to repair, and the right sort of varnish will last a long time. The same conditions apply to the finishing of entrance doors. In regard to porch floors, the coating must not only be weather resistant but must also be resistant to abrasion. Special products which are offered for this use, are most satisfactory.

The addition of a small percentage of good floor varnish to any high grade exterior paint will add the necessary elasticity and resistance.

Never defer or neglect painting or repainting. Of course, decorative value must not be overlooked, but paint is needed to conserve and to preserve. There is an economic purpose to painting that is measured by conservation rather than cost of paint per gallon. For this reason it always pays to repaint a little in advance, rather than a little in arrears of absolute necessity.

MAKING ORTHOPEDIC APPLIANCES IN THE HOSPITAL

By WALTER T. WILLIAMS, Cincinnati

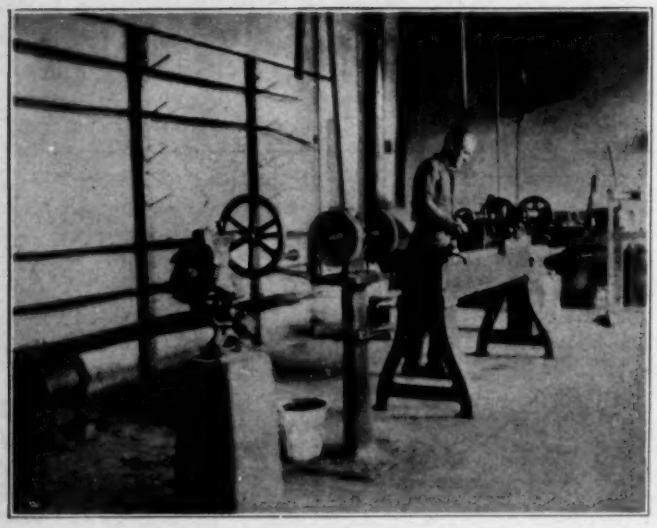
WHILE the Cincinnati General Hospital represents the latest in hospital development in many respects, until recently it was in great need of one thing, that is, it contained no department for the manufacture of orthopedic appliances. However, this much-needed department has now been supplied, and the hospital has that modern equipment which constitutes an important part of its resources.

Through private donations and as a part of the widespread activities of the Babies' Milk Fund Association, a thoroughly modern and adequate mechanical equipment has been secured for a department that is known as "The Brace Shop," and it is installed in an appropriate place in the power building of the hospital. The shop is conducted under the direction of Dr. Albert H. Freiberg, who is director of orthopedic service of the hospital and is, at the same time, by the terms of the city charter, professor of orthopedic surgery in the College of Medicine of the City of Cincinnati, which is located adjacent to the general hospital.

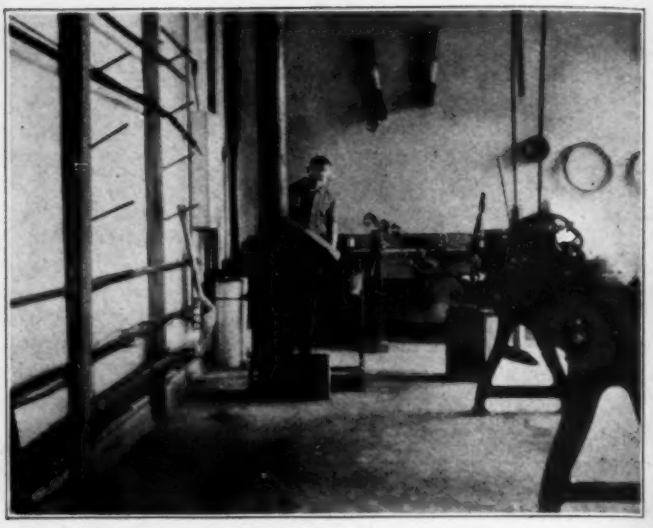
It is the purpose of the brace shop to render service to patients in the wards of the hospitals, as well as to patients coming to the dispensary or the outpatient department. In addition, it has a very important function to perform for the school for the handicapped children. The school is located in the hospital and it is maintained by the board of education of the city, as authorized by a state law. By means of three big motor busses, there are brought to this school each morning more than 100 children who are physically handicapped to a degree that makes it desirable for them to attend a special school.

About seventy-five per cent of these children are or-

Two plaster models are shown in this picture. On the one at the left may be seen steel bands which have been fitted to it. By means of a big drawing-knife, the mechanician is trimming and shaping up the other brace which is shown at the right.



The little machine in the foreground is used for cutting sheet steel into forms for strengthening braces. The second machine is an emery wheel and a polishing wheel, and the next is a machinist's lathe.



In this picture is shown the forge at which the steel parts are formed and tempered. Steel rods and strips are shown at the left, in the wall rack.

thopedic cases, the remainder being handicapped in such ways as by cardiac disturbances and similar diseases. It is regarded as exceedingly important that such a school have the advantage of a contiguous brace shop, because a very large proportion of the children require braces which must be properly made and fitted, and what is almost as important, these appliances are constantly requiring repair service. The nearness of the brace shop is therefore of great value.

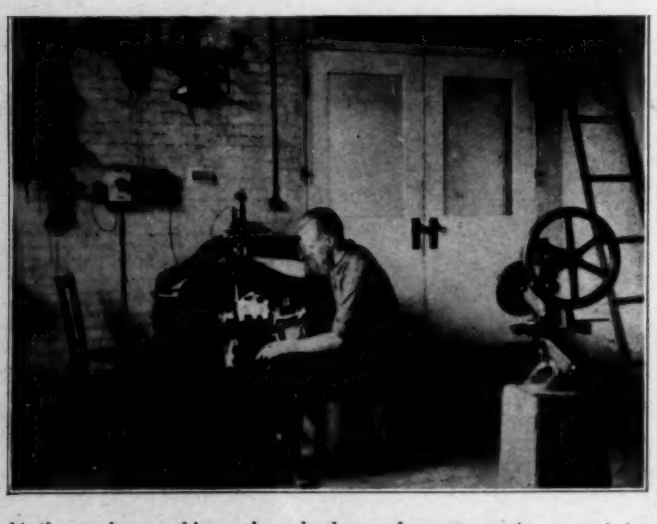
In the hospital itself there are not only children with joint tuberculosis, infantile paralysis, congenital dislocation of the hip, club feet and other pathological conditions, but there also are adults with crippled joints and diseases of the spinal bones, with deformities and ailments of the trunk and extremities. The treatment of these cases calls for a great number and a wide variety of braces, all of which are made in the shop, in addition to the braces for the crippled pupils in the school; and all of this is done with a minimum of expense and a maximum of efficiency.

There is an especial advantage in having the hospital manufacture its own orthopedic appliances in that practically every appliance must be individually fitted to the patient, and much time and effort are thus saved if this can be done in the hospital itself.

Not Competitor of Commercial Shop

But the brace shop is not so conducted as to be a competitor of the commercial orthopedic appliance concerns. Most of those who are supplied with appliances are too poor to be able to purchase them at the regular price and, therefore, necessary as they are, if they could not get them from the hospital they would have to do without them. The amount paid for an appliance is, in each case, adjusted to the patient's ability to pay. Some are able to pay what it costs to make the device, others can pay only part of the cost, while still others can pay nothing. Some are allowed to pay by installments. A typical case is that of a little patient, a boy who, by making beads of sealing wax, earned fifty dollars to pay for his braces.

Naturally, the brace shop depends on the plaster department for the plaster casts from which it makes its models, on which the different appliances are formed. Some of these models and also the finished braces may be seen in the accompanying illustrations. The plas-



At the sewing machine, where leather and canvas parts are put together. Next to this is Mr. Jergens' desk, and on the wall some finished braces may be seen.

This view shows a specimen of the work that is done in the brace shop of the Cincinnati General Hospital. A great many of the braces for spinal support have heavy leather casings with steel reinforcements.

ter department is located in pavilion A, adjoining the other rooms of the orthopedic department, which is in charge of the orthopedic service of the institution. A section of the plaster department is shown in one of the illustrations.

The cost of equipping the brace shop, several views of which appear on these pages, was less than $1,500, although it is very complete and entirely modern. It is located in pleasant quarters in the hospital's big power-plant building, which also contains the institution's machine shop, carpenter shop, laundry and other mechanical departments. The shop is equipped for a half dozen workmen, but at present there is only one, Clarence L. Jergens, a veteran of the World War, and a capable man who was trained for this work by the government.

Apprenticeships for the Handicapped

It is hoped that a larger force may be developed by offering apprenticeships to men who are themselves handicapped. The employment of former service men is regarded as especially desirable. There is, however, a state department for industrial rehabilitation which is anxious to place some of its wards in this manner.

The abdomen and the right leg of the little patient have been encased in plaster. When braces are to be made, similar plaster casings are used as molds in forming the pattern for the brace-maker. The persons shown in the picture are Dr. Elmer Klein, in gown, who made the cast, Miss Newman, nurse, who assisted, and Dr. Clarence Betzner, who also makes casts.

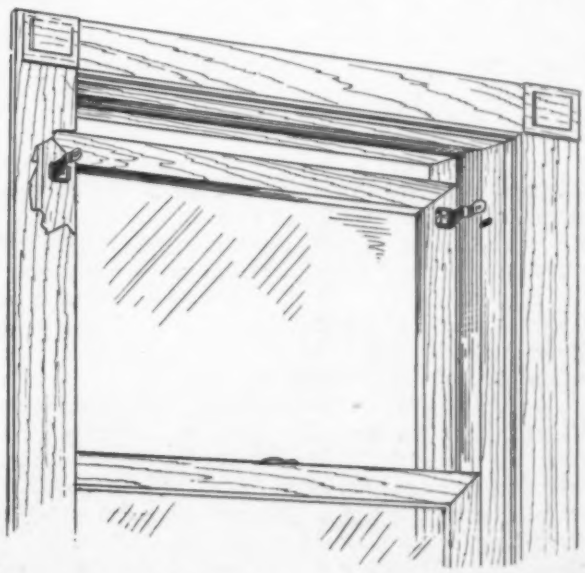
In order to become a brace maker one must become proficient in several trades, or in part of them. First, he must understand plaster work, in order to make the plaster models, or forms. Then one must be a blacksmith, in order to forge and temper the steel parts and he must also be a machinist, in order to fit them together. Last of all, one must be skilled in doing several kinds of leather work, in order to shape thick leather for certain types of braces, sew it together, either by hand or machine, and pad the device and line it with fine, soft leather.

It is confidently expected that this department will develop in considerable proportion in the future. In consideration of the short time it has been organized, the brace shop has been able to do remarkably satisfactory work, and has received the commendation of the hospital management.

WINDOW VENTILATION

The question of proper ventilation in hospitals has been discussed with considerable spirit for many years. Regardless of the merits of so-called mechanical ventilating systems, the proponents of window ventilation appear to be in the majority.

Window ventilation requires first of all proper circulation of air. This necessitates the opening of the window at both the top and bottom. To accomplish this satisfactorily provision must be made for the hanging of shades and their control so that the shade will not impede the circulation of air or annoy the patient with constant flapping while whipping itself to pieces.



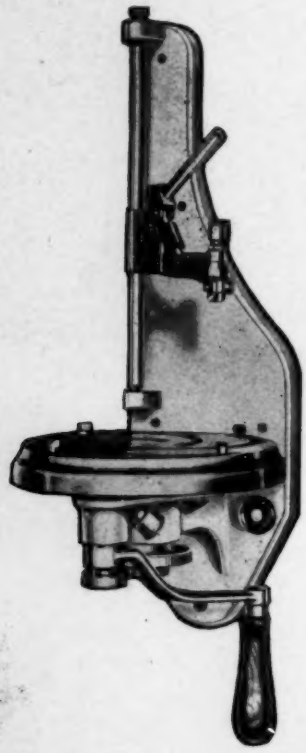
One of the most effective and economical means of shade control consists simply of extension brackets which are attached to the window sash in which the shades are

quickly inserted and operate in a natural manner. Both because of ease of attachment and removal, these brackets are recognized as unusually satisfactory.

UNIVERSAL CAN OPENER

Every hospital executive who has done duty in the kitchen or who is familiar with kitchen problems appreciates the annoying difficulties connected with the opening of canned fruits, vegetables and other food. Practically all of the old time can openers on the market are slow and tedious in their operation or are suitable only for cans of given size and shape.

A new universal can opener which has recently been marketed provides a dependable and safe method of opening any size or shape of can. This type is stationary,



being attached to a bracket which can be fastened to wall or cabinet. Its range of service is wide, as it will open round, square or oval cans from a No. 2 size to a five pound coffee can or from 2 to 7 inches in diameter.

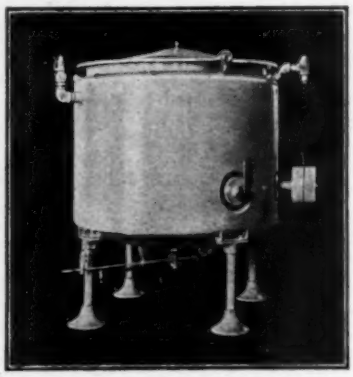
The operation of this can opener is decidedly simple. All that is necessary is to place the can of any size or shape on the turntable, lower the cutting assembly and turn the crank. An ingenious gripping device consisting of four steel jaws which move in eccentric slots, firmly grip and hold the can when the crank is given a slight turn. In lowering the cutting assembly the hardened steel knife punctures the top. The can then revolves as the turntable is turned and the knife, which is swivel mounted, automatically follows the rim of the can, any shape, until the top is entirely cut out. The entire operation does not take as long as that of reading the instructions.

Not only the speed and certainty of operation should make this device appeal to hospitals, but a permanent installation of this kind insures facilities for opening any size can without searching through cutlery drawer or racks for the elusive can opener.

The machine is substantially constructed and well finished, insuring continuous service for a long period.

A SMALL PASTEURIZER

There are many hospitals which will find it desirable to control directly the pasteurization of their milk and cream. In doing this they are able to supervise all but the original conditions under which the milk is produced. With due respect to the city milk dealer, it goes without



Small unit glass-lined milk pasteurizer.

saying that the standards of the hospital are considerably higher; and necessarily so, inasmuch as the slightest carelessness may be the occasion for widespread infection. On that basis also, it is dangerous, especially in communities where the pasteurization ordinances are not rigidly enforced, to depend upon outside regulation.

Then, too, there is the case of the hospital maintaining its own herds, where presumably the cows are inspected and are, to all appearances, safe from contamination. Yet it is easy to unknowingly harbor a "carrier" and thus set up all kinds of possible contamination. The purpose of pasteurization is not, as has been so often said, to make unclean milk fit to drink but rather *to make clean milk safe to drink*.—And that, of course, applies peculiarly well to the hospital.

A leading manufacturer of glass-lined steel equipment, is marketing a small glass-lined pasteurizer, capacity 125-300 gallons, which is ideal for the hospital of 500 beds or more. It is very reasonably priced and is being used in hundreds of the smaller and medium sized American milk plants. As the illustration shows, this pasteurizer is the vertical batch type and uses live steam as a heating medium. (In hospital use, it is economy to attach the steam inlet to the boiler exhaust pipe and thus save fuel expense.)

The very nature of the heating arrangement suggests economy of operation. The steam enters the circular spray coil, which surrounds the top of the tank; here it is forced through small spray nozzles directly into the jacket, and against the outer wall or the inner tank. This is an exclusive feature, and an advantage over the ordinary method of heating where the steam enters from the bottom and is obliged to pass through the falling condensation of the steam already in the jacket.

Then there is the point of facility in cleaning, which, of course, is important in connection with hospital hygiene.—Being glass-lined, the surface of the tank responds readily to a solution of Wyandotte and warm water, making it as clean as a milk bottle. This glass lining is highly instrumental in keeping the bacterial count low, since there are no joints or crevices to accumulate foreign material, rancid butterfat, etc.

The uniform and rapid heating of the unit prevents any deterioration either in the body or in the cream line of milk, and there is no metallic taint which is apt to develop in the use of metallic vats. In general, glass-lined equipped has become very popular in the dairy field, and has been received as an advance in standard plant machinery.

DISPENSARIES AND OUT-PATIENT DEPARTMENTS

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APPOINTMENT SYSTEM IN THE CHILDREN'S CLINIC OF THE NEW HAVEN DISPENSARY*

BY ETHEL C. DUNHAM, M.D., NEW HAVEN, CONN.

THE Children's Clinic in the New Haven Dispensary has been conducted for many years according to a system which is almost universal in this country. The clinic was in operation for only a part of the day, from 10 a. m. to 12 noon; all patients were admitted between 9 and 10 a. m., so that they would be in readiness when the physicians arrived. Patients applying after 10 a. m. were turned away and told to return earlier the next day.

On admission to the dispensary the patients were given cards bearing numbers in the order of application, directed to the benches and instructed to wait their turn. The first patient to apply was the first to be seen. If the dispensary physicians arrived late or did not arrive at all, or if the number of children admitted was excessive, it sometimes happened that at the end of the morning's waiting those patients remaining were told they could not be seen, or else were dismissed without examination, being given a prescription or verbal directions for treatment, which it was hoped would satisfy.

Method Entailed Economic Loss

Patients coming to a children's clinic are as a rule accompanied by adults; either parents, social workers or nurses. The necessity for the patient to reach the clinic early in the morning and to wait until seen necessarily entailed inconvenience or economic loss. The mother must do the housework, get the other children off to school, look after the baby at home and cook the dinner. The father must do his day's work and obtain his wage. If the work is at night, the day's sleep must be safeguarded. Time is of vital importance to the majority of dispensary patients. But under the old system of dispensary management the only person considered was the physician. For the patient, time had a negligible value and economic necessities did not exist.

The visiting nurse and social worker also suffered under the system. Their time is measured in community money and their responsibility is to large sections of the community. Yet they were obliged to use, for the sake of a single child awaiting a chance to be seen, the time which might be used in the interests of many. The system is medieval. It prevents the dispensary from fully reaching a class of people it was designed to reach, and thus from fully performing its function in the community. It is astonishing that it has been permitted to exist unchallenged for so long a time.

Distribution of Work Uneconomical

Though the method of conducting the dispensary just described would seem to offer advantages to the dispensary physicians only, especially as it seems to have been evolved entirely with a view to this selfish interest, yet in actual experience such is found not to be the case. The numbers of patients to be seen varies within wide limits from day to day so that the amount of work cannot be satisfactorily foreseen and planned. On Saturdays, Mondays, after holidays and on pleasant days following bad weather, crowds of children come and the capacity of the clinic is overtaxed. On other days there are often small numbers of patients and not enough work is required to keep the physicians busy.

This uneven distribution of work is most uneconomical of the physician's time and has a perhaps unconscious influence on him, tending to make him irregular in his attendance and less careful in his work. Moreover, the dispensary is kept in a continual state of tumult and confusion because those waiting are crowded together, restless and noisy. Patients not seen until the end of a long period of waiting are tired, hungry and uncooperative; they do not return on the day the physician assigns because they cannot afford to do so or are unwilling to repeat past experiences. In order to finish his work in time the physician is often obliged to give those patients seen at the end of the morning entirely unsatisfactory examinations and often gives them none at all, substituting for advice based on an intimate knowledge of the patient's condition some valueless "placebo."

At the beginning of the school year, October, 1921 the clinic was reorganized on an appointment system and the hours were extended so that the clinic was open throughout the day from 9 a. m. to 5 p. m. This plan had already been successfully put into operation in a children's clinic of the American Red Cross in le Havre, France[1] during the war.

The new plan has now been in operation for one year. Patients and physicians have found it of equally great value and experience with it indicates that it can be easily

*From the Pediatric Department of the New Haven Hospital and Dispensary, Yale University School of Medicine.

1. A Children's Dispensary Organized on the Basis of Appointments for Patients. Park, E. A., and co-workers. The Modern Hospital, 1919, Vol. III, No. 2.

instituted in any free or pay clinic with great advantage to all concerned. Therefore, it has seemed best to publish this report at this time with the briefest outline of the equipment, personnel and organization. *The fundamental idea of the appointment system as applied to the dispensary is to afford the patient from the poorer classes all the consideration, opportunities and privileges which those in better circumstances secure in the offices of private physicians.*

Maintains Personnel of Six

The children's clinic of the New Haven Dispensary is small. The personnel consists of the physician-in-chief, an assistant and four interns, all of whom are also on the staff of the New Haven Hospital, and two part-time clinical assistants. A group of medical students act as clinical clerks under the supervision of the staff physicians, take histories and dictation, make "progress notes" and do the routine laboratory work. A nurse devotes her entire time to the clinic, takes temperatures of patients, weighes them, and assists with diagnostic and therapeutic procedures. A clinical secretary attends to the admission and discharge of patients, makes new appointments and checks appointments kept.

The histories are sent to the secretary's desk from a central history room. The secretary stamps the history with the date and sees that it reaches the hands of the physician when the patient has arrived. She also indexes the diagnoses which are recorded on the front sheet of the history by the physicians and keeps a card index of all patients seen in the children's clinic with the date of each visit and the diagnosis at that particular time. The clinic secretary, on whose ability the success of the appointment system largely depends, was the only addition to the working force made necessary under the new system. A full-time social worker takes charge of the work in her special province, makes "follow up" calls and arranges for the admission of patients to the hospital.

The floor plan of the clinic (Fig. 1), which does not represent an ideal arrangement, is shown to indicate how the available space was utilized.

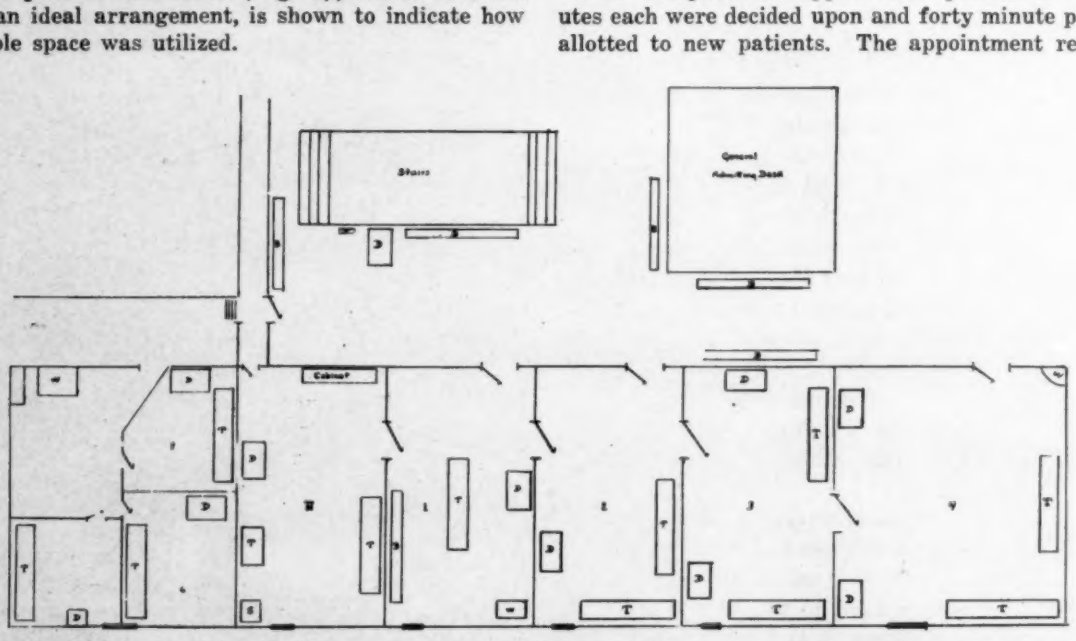

Fig. 1.—D1—Desk of secretary of pediatric clinic; B—Benches for waiting patients; 1, 2, 3, 4—Examining rooms; R—Temperature and weighing room; 5, 6, 7—Isolation cubicles; S—Scales; T—Examining tables; D—Desks; W—Wash bowls.

The hallway is used as a waiting room and here the desk of the clinic secretary is so situated that she is able to see all patients as they come in and leave. There are four examining rooms and one treatment room, and three cubicles for the isolation of children with contagious diseases. The laboratory is on the second floor just above these cubicles. The size of the rooms and their relation to one another are indicated in the plan.

Appointment Sheets for Each Day

Obviously the change from the old to the new system could not be made abruptly. It was necessary to formulate a plan of procedure and to prepare adequate record sheets for listing the appointments and to draw up suitable appointment cards. The change was rendered more difficult by the fact that the other clinics in the New Haven Dispensary continued to operate on the old plan from force of circumstances. Accordingly, appointment record sheets are printed on which the hours of the appointments, the names of the physicians, and the names of the patients having appointments for each day could be listed. Each sheet (Fig. 2) is for a single day.

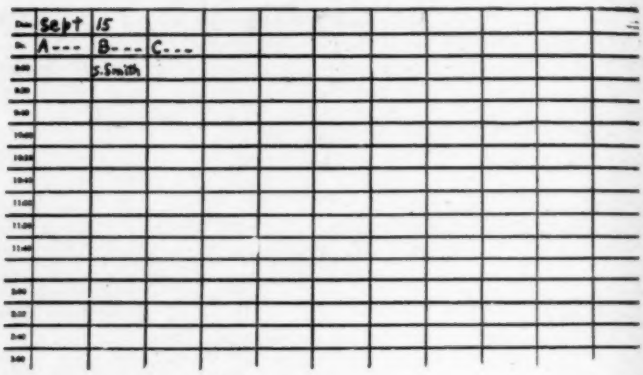

Fig. 2.—At the top of each sheet is the date. The names of the attending physicians are entered in the spaces in the second line. In the left hand column the appointment hours are indicated, opposite these and under the name of the physician with whom the appointment has been made is recorded the name of the patient. Thus, the patient, S. Smith, has an appointment at 9 a. m. on September 15, with Dr. B.

For "old patients" appointment periods of twenty minutes each were decided upon and forty minute periods were allotted to new patients. The appointment record sheets for the day and succeeding days are kept on the secretary's desk so that the physicians can refer to them at any time. By looking at appointment sheets the physicians can always learn the number of patients assigned to them

and the time allowed for each on the day in question or any future day. For admission to the clinic the card already in use for admission to the various clinics in the dispensary (Fig. 3) was available. It was necessary merely to stamp it "Pediatrics" in the space designated.

NEW HAVEN DISPENSARY

No..... Unit No..... Date.....
Name .....
Address .....
.....Age .....
Dept. Dept.
.....
.....
.....
.....
.....
.....

Save this card. Alway bring it with you.

FIG. 3.

A special appointment card (Fig. 4) on which the date and hour of the appointment is recorded was printed.

NEW HAVEN DISPENSARY
321 Congress Ave.

The Doctor wishes ..... *Clinic*
to return to the .....
on ..... *for further treatment.*

BRING THIS SLIP WITH YOU.

FIG. 4.

On October 15, 1921, the first appointments were made. "Old patients" were assigned appointment hours for their return visits and the majority of them were made to fall due in the afternoon, in order to accustom the patients to come in the afternoon. In this way the fact that the clinic was open throughout the day was given publicity by the patients themselves. In two or three week's time the secretary was directed to make appointments for the morning hours also. A notice was sent to the newspapers calling the attention of the public to the fact that the clinic was in operation on a new plan and emphasizing the advantages of the appointment system and of making and keeping appointments. Physicians of the community and of nearby towns were notified and urged to refer patients who might thus, at small expense, be afforded the benefit of the advice of specialists in children's diseases and of the x-ray, electrocardiogram and laboratory aids to diagnosis which were at the disposal of the clinic. Special letters were sent to organizations dealing with children, as the Visiting Nurse Association, the Connecticut Children's Aid Society, the Charity Organization Society and others, stating that patients were to be seen by appointment and asking their cooperation both in making and keeping appointments.

As the appointment record sheet indicates, patients may make application for admission to the clinic at any time between 9 a. m. and 5 p. m., except Saturday afternoons, Sundays and legal holidays. The physicians, however, are on duty to examine and treat patients only from 9 a. m. to 12 noon and from 2 to 5 p. m. Appointments for the noon hours are not made in order that the dispensary staff may have free time to attend ward rounds in the hospital from 12 to 1 p. m. and for lunch. The clinic secretary or the nurse, however, is on hand in the dispensary during the noon hours to make appointments for other times of the day. If a very sick patient applies for medical care during the noon hours, the secretary will immediately call a physician from the hospital and the patient is cared for without delay. Appointments may be made by personal call, or equally well by letter, telephone or through nurses or those connected with the various social agencies. The dispensary suffers a great disadvantage by being separated from the hospital (it is half a block away) for under ideal conditions the children's clinic should be open for the reception of emergency cases at all hours. Under the conditions which obtain in the New Haven Dispensary it is necessary that all patients applying for treatment between 5 p. m. and 9 a. m. be referred to the accident room of the hospital.

The patient on arriving at the dispensary goes to the central admitting desk for all clinics, pays the first admission fee and receives a card (blue card, figure 3). On this card his name, address, age, and unit number are recorded. The number is also recorded on the patient's history sheet. If the patient is to be admitted to the children's clinic, the card is stamped "Pediatrics." If the patient is making a return visit to the children's clinic, i. e., an "old patient" he presents the card already in his possession at the central admitting desk, pays the admission fee and is directed to the desk of the secretary of the children's clinic.

In order to make clear the modes of procedure in all cases, the patients who apply at the secretary's desk for admission to the children's clinic may best be divided into two groups. The first group is composed of those who have already made appointments; they carry appointment slips in their hands and the name of each member of the group is already recorded on the appointment record sheet for the day. This first group includes (a) new patients, that is, those who have never visited the children's clinic before and (b) "old patients" making a return visit. On the arrival of a patient of this group carrying an appointment slip the procedure is simple: the secretary takes the slip and checks the patient's name on the record sheet, thus indicating the fact that the patient has arrived; the arrival is brought to the attention of the physician and at the proper time the patient is seen by him. The second group is composed of those patients who have not made appointments. Patients in this group are or are not given appointments, according to circumstances.

A certain number of appointment periods often happen to be free on the day of application because all the periods of all the physicians may not be filled. Moreover, patients failing to keep appointments give free periods for patients applying for admission without appointments. Patients who come to the clinic without appointments do so through ignorance of the appointment system, misunderstanding or lack of cooperation or because of a sudden illness or a sudden change in condition not anticipated at a previous visit. These latter may have an appointment for some future date but rush to the physician for immediate care. When a patient not having an appointment makes application for admission, the procedure is as follows: The secretary calls one of the attending physicians to determine if the condition of the patient demands an appointment on that day. In the event that the case is one of acute illness, the physician calls the chief of the clinic or the first assistant who sees the patient. If he agrees that the case constitutes an emergency, he arranges for an immediate appointment or immediate admission to the hospital or treatment as the situation re-

quires. If there happens to be no free period on the schedule of any physician, it is always possible in case of emergency to place a patient on the schedule of some physician between two appointments.

The periods allotted for "old patients" and for new are purposely made longer than required for many of them so that a certain amount of leeway can always be obtained in case of emergencies. In the event that the case is not one of acute illness, the patient is offered the first free period either on that day or a subsequent day. The patient, however, may have come from out of town at considerable expense or from some distant part of the city; a mother may have brought several children or made some special arrangement which enables her to leave home at that particular time, but cannot be repeated. Such situations constitute emergencies and appointments are given as rapidly as they can be worked into the physicians' schedules. Lack of cooperation in keeping appointments is usually due to failure to understand and is dealt with according to the factors involved in each particular case. If the patient is late he loses his appointment period and some other patient without an appointment is given that period. The patient who is late must then await the chance of another appointment on that day or make an appointment for the next day.

Occasionally in crises the appointment system is partially suspended and even large numbers of patients are seen without appointments. For instance, when smallpox broke out in a nearby town, children were vaccinated at any time they applied. At these times the schedules of one or more members of the staff were kept free from appointments and these members of the staff were detailed to vaccinate all applicants. As must be evident, the appointment system as put in operation in the children's clinic is made elastic. The time of the physician can be adapted to the needs of the patients as circumstances may make necessary.

After the appointment of the patient with the physician is ended, the physician decides on the advisability of making a new appointment. If it seems indicated, he consults the patient and decides on a day for the next visit, taking into consideration the convenience of the patient and the available time on his schedule. The secretary, also, consulting the patient decides on the hour, records the appointment on the record sheet and fills in the appointment slip with the date and hour and gives this to the patient. The physician and the secretary impress upon the patient the importance of keeping the appointment and of keeping it exactly on time. The patient is then ready to leave the dispensary.

Since the introduction of the appointment system the total number of visits to the clinic has increased, in spite of the effort to curtail unnecessary visits. The number of new patients has increased also, so that as far as numbers in themselves go, the system has been a success. This system, combined of course with other factors, has brought up the attendance over the previous year and has, in fact, proved a record year for the clinic. The total number of visits to the clinic, month by month, and the increase over the attendance during the same period in 1920-21 is shown in table 1.

TABLE 1.
Total Number of Visits for 1920-21.

	Oct. 15-30	Nov	Dec	Jan	Feb	Mar	Apr	May	Jne	Jly	Aug	Sep	Oct. 1-15
1920-21	391	548	497	495	483	472	481	669	466	350	478	854	336
1921-22	371	521	595	799	635	784	671	1024	673	574	778	1176	391
Gain...	20	27	98	304	152	312	190	355	207	224	300	322	55

The largest number of patients seen in any one month was 1,176 in September, 1922; the smallest 521, in November, 1921, with an average of 749 per month in 1921-22 compared with 501 per month in 1920-21. The total number of visits made from October 15, 1921 to October 15, 1922 was 8,992, as compared with 6,520 visits in the same period 1920-21, or a gain of 2,472 visits. The number of visits showed an increase in every month except the first two months.

The rapid and real growth of the clinic is perhaps best shown by comparing the number of new patients who presented themselves at the clinic in these two periods, as seen in table 2.

The total number of new patients seen has increased by 648 over last year. An increase is shown for every month compared with the same month in the previous year, with the exception of September.

The number of appointments made has increased gradually and steadily throughout the year as has also the number of appointments kept. With an appointment system working in an ideal way, the total number of visits should, of course, be equal to the number of appointments kept and should always be the same or slightly less than the total number of appointments made. The accompanying curves show the way in which the appointment system has developed in the clinic. (Figure 5.)

The dotted line represents the total number of patients seen per month. Under ideal conditions this line should approach a straight line showing that with a fixed number of working rooms, hours and physicians, a fixed number of patients can be handled efficiently. The high points in the curve reached in January, May and September do not express the true state of affairs; they are explained on the ground of large numbers of patients applying for vaccination in those months.

Appointments Largest in March, 1922

The continuous line represents the number of appointments made per month. The smallest number of appointments under the new system was made in the first two weeks, (October, 1921) the largest number in March, 1922. It is of interest to note that between February and March the dotted line crossed the continuous line showing that at this point the total attendance equalled the appointments made.

The interrupted line denotes the number of appointments kept. This line more closely approximates the con-

TABLE 2.
Total Number of New Patients at the Clinic in the Two Periods.

	Oct. 15-31	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. 1-15
1920-21.....	56	91	102	116	85	102	119	162	98	96	136	360	60
1921-22.....	70	115	301	195	133	180	152	275	126	115	166	297	106
Gain.....	+14	+24	+199	+79	+48	+78	+33	+113	+28	+19	+30	−63	+46

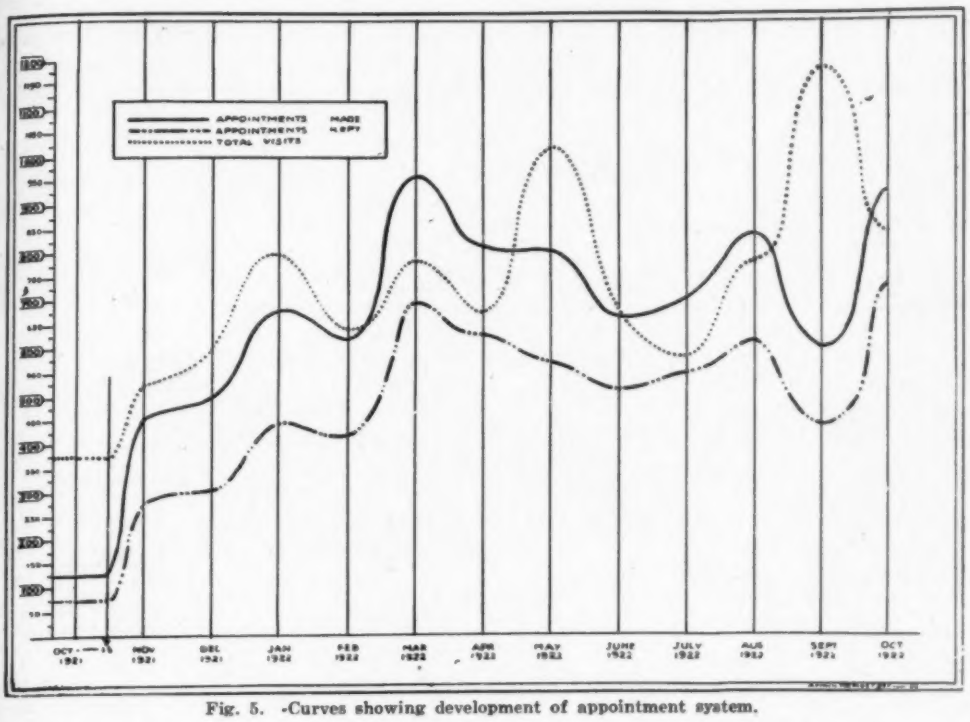

Fig. 5. -Curves showing development of appointment system.

tinuous line as the months progress, showing that the appointments kept more closely approximate the appointments made.

During the year, 8,155 appointments have been made and 5,796 have been kept, or an average of 71.2 per cent.

In table 3 is shown the per cent of appointments kept month by month.

TABLE 3.

Per cent of Appointments Kept Month by Month.

	Per cent		Per cent
October 15-31, 1921	60.48	April	77.16
November	60.96	May	70.48
December	60.20	June	77.00
January, 1922	65.33	July	78.53
February	66.99	August	72.65
March	71.88	September	74.70
		October	77.50

The per cent of appointments kept was smallest in the first two weeks under the new system, with 60.48 per cent kept in October, 1921. In July, 1922, 78.53 per cent of appointments were kept and this was the month in which the best record was made. An average of 71.2 per cent has been made and fairly consistently maintained and this is perhaps about as high an average as can be expected. Only by comparing this year's record with those of succeeding years can one be certain of this point.

The advantages of the appointment system to the patients considered individualiy are too evident to demand mention but the advantages to the dispensary physician himself and to the community as a whole may not be fully apparent to anyone who has not had actual experience with the system.

One advantage of the appointment system to the dispensary physician is the more nearly even distribution of work. When it is possible to foresee that numbers of patients without appointments will apply for examination and treatment on certain days, appointment periods are left vacant on the physicians' schedules. Unless necessary, for example, patients are not assigned return appointments which fall due on Saturdays, when school children are apt to drift in without appointments, or on Mondays or the days after a holiday.

On the afternoons when clinics for special diseases are held the number of appointments, for children not belonging to these groups, are limited as far as possible. Under the system patients present themselves with fair regularity, even on rainy days and by means of it it is possible to regulate the demand to the supply and the supply to the demand probably better than in any other way. To anyone desiring to do careful work, the knowledge of the existence of adequate time is essential. Nothing is worse for the dispensary physician or his morale than the necessity frequently to throw thoroughness to the winds in the effort to get rid of a crowd of patients as rapidly as possible.

The noise and confusion in children's clinic are in a general way proportioned to the numbers present. Frequently under the appointment system not more than half a dozen children wait on the dispensary benches at any one time of the day. Large waiting rooms become unnecessary and thus the danger of contact with children having contagious disease is reduced. Such risk is very great when large numbers of children assemble because of sickness.

With the appointment system in operation it is easy, if desired, to group patients into special clinics by assigning them appointments for particular mornings or afternoons on the schedules of physicians having special training or interests. Thus patients with heart disease are given appointments on the Wednesday afternoon schedule for Dr. A. and children having congenital syphilis on Dr. B's schedule for Tuesday and Thursday afternoons. By means of appointments it is easy to assemble good case material of a general character or of a particular kind on any given morning or afternoon for teaching or other purposes. The formation of special clinics occurs as a natural development from the appointment system.

Unnecessary Return Visits Reduced

All those who have worked in children's dispensaries under the old regime know that patients are seldom discharged. Instead, they are told to return sometime, until finally they discharge themselves by ceasing to return at all. It is a very easy matter for the dispensary physician to fall into the careless habit of directing his patients to make return visits which are not needed, when he knows that they likely will not come back anyway, or if they do come back it will be no particular bother to send them away again after a few moments of examination. The dispensary physician does not, however, so easily assign to a patient an appointment on a definite day and hour without a reason. Under the appointment system the evil of unnecessary return visits is reduced. At the same time the repetition of visits to the clinic which are necessary is from the very nature of things stimulated. It is at present a custom to gauge the efficiency of a dispensary by inquiring into the percentage of return visits of its patients. But such a method of estimation is one sided and therefore fallacious. For a dispensary to operate with maximal efficiency things must be so ordered

that all patients requiring return visits make them and no patients make return visits who do not require them. The tendency of the appointment system of administration is to limit the return visits to those actually required and to lead to their continuance.

Organizations dealing with children have formerly depended on the dispensary for the examination and treatment of children under their care but they have not used it to its full extent. These organizations have sent children to the clinic only as a last resort when there was no other way of obtaining an examination. Their agents, nurses and social workers, objected to long periods of waiting and the patients in their charge suffered from the same inconvenience. Those concerned, moreover, felt the lack of personal interest necessitated by the hurry and rush, the difficulty in getting a statement from the doctor as to the child's exact condition and in getting advice when some complication as to the disposal of the child arose.

A patient of somewhat higher social plane or more refinement than the average disliked to mingle with the crowds of waiting patients. With the institution of the appointment system, the dispensary is able to work to the fullest extent with all these agencies as is evidenced by the demand made by them for examination of the children under their care. When the examination is complete, cards or "refer blanks" brought by the patients, or by those accompanying them, are carefully filled in by the physician and mailed by the secretary to the organization responsible for referring the patient.

It is not the social organizations alone who profit by the appointment system. The dispensary also gains great advantages from these associations. Aside from supplying the clinic with patients who, because of their supervision by one of these organizations, are thus more satisfactory to work with, the social agencies help the dispensary in other ways. They find suitable homes for convalescent patients or patients ill with some chronic disease. They assist the clinic by making "follow up" calls on patients and in getting their cooperation and urging them to make return visits. The nurses go to the homes, see that treatments prescribed in the dispensary are carried out properly and report on the condition of patients who are unable to return. Patients discharged from the clinic as cured are referred to the welfare clinics of the visiting nurse association where each week their weights are taken and recorded and their feeding regulated by the physicians in charge. Older children are referred to the pre-school or nutrition clinics for weights and observation. The nurses and doctors send these patients back to the dispensary if they become ill.

There is no reason why the dispensary should not be made an asset to the practicing physicians of the community. It should of course be a place to which the physician can refer patients who are not able to pay fees and where he can assure them they will be courteously received and where their condition will receive as careful attention and consideration as if they were pay patients in a private office. It has, however, another function to fulfill which should be of equal, if not greater, importance to the practicing physician. The dispensary should be a place where physicians can obtain consultations for those of their patients who are unable to pay consultation fees. On account of the close association with the medical school and the hospital, the laboratories, x-ray, and other special aids to diagnosis are available to the dispensary patient. The physician who refers a patient is urged to send a note to the chief of the clinic. The results of the examination, the reports of laboratory and special examinations and the reports of consultations are then submitted in writing to the referring physician and the patient directed to return to him.

It is needless to say that with the introduction of any new system certain disadvantages become apparent, which must be weighed against the advantages in judging of the success of the system.

It seems somewhat superfluous to make this statement and yet the success of the system depends on this point perhaps more than any other one thing. The class of patients who make use of the dispensary are not accustomed to conducting their lives on a time schedule. Many cannot tell time or do not have clocks in their homes. Perhaps one of the most vital things that these people have to be taught is the importance of regularity as a factor in their lives making for the well being of their children. Keeping an appointment with the physician is an important first step in the education of the patient.

The physician on his part has certain definite hours assigned to his dispensary work but each physician must see to it that his schedule is faithfully carried out or the system breaks down and the patient who has to wait feels the futility of having made an appointment. The individual interest of each physician to make the system a success is the most difficult factor to insure. When the physician becomes accustomed to the system he appreciates the advantages to himself and to his patient but he must be educated gradually to working in this way.

On an appointment schedule the time allotted for a visit must be fixed. In actual practice there must be great variations in the time needed to see a patient. There is, moreover, a great variation in the rate at which the individual physicians work. This of course does not apply alone to the dispensary but to any group of physicians and patients.

Patients who are interesting from the medical standpoint cannot be demonstrated to the staff at the time they are seen but must make a return visit for this purpose. A demonstration would upset the schedules of all the physicians. The condition of the patient may be changed at the next visit so that the interesting points cannot be demonstrated. Those cases in which a consultation is required cannot, of course be foreseen.

When the number of those applying for appointments is so large that all the appointments for all the physicians are filled each day, the clinic cannot grow. With a given number of examining rooms, a given number of physicians, fixed working hours and a fixed number of appointment periods, a point is reached at which the maximum number of patients seen per day is attained. At this point expansion can only take place by increasing one or all of these factors. It has already been pointed out that the number of patients to be seen in a day by any one physician is more or less fixed and limited.

From a year's trial it is clear that all of these difficulties can be or have been met and dealt with. Time is required to educate the patient and the physician to keep the appointment promptly and thus to feel the material advantage in this arrangement. The time allowed for a visit has been worked out by experience and a general average struck which proves satisfactory in this clinic. A "hold-up" of the whole clinic for the demonstration of an interesting condition was an evil of the old system to be dispensed with and can be obviated by special arrangements. The limitation of the number of patients to be seen raises the character of the work done, calling for thoroughness and efficiency. The supply of physicians is

really adjusted to the demands of the patient. The advantages of the system far outweigh any apparent disadvantages.

In summarizing it may be said that the appointment system in the organization of a children's clinic has many obvious advantages over the old system of conducting a clinic.

1. The organization is relatively simple. It requires only a scheme for fitting the working hours of the physicians to the demands of the patients, a chart for recording appointments and a card which the patient may bring with him at the appointment hour.

2. The plan is readily adaptable to a clinic of any size. It is equally workable on a part-time or full-time service.

3. A dispensary organized on an appointment system offers the best service to the patient, since the economic value of the patient's time is recognized and a careful examination is insured.

4. The system affords to the dispensary physician an opportunity to work in an orderly and systematic manner.

5. It offers to the physician in private practice the opportunity of making available to those of his patients who cannot afford to pay, all the laboratory aids to diagnosis and consultations with the specialists of the hospital and dispensary.

6. It affords the most efficient cooperation with nurses, social workers and the agents of the organizations dealing with children.

7. By means of the appointment system the dispensary can assume a position of usefulness in the social organization of the community which, under the old system, was impossible.

THE CURRENT TREND IN DISPENSARY PRACTICE*

By C. H. GODDARD, M.D., Assistant Director, Johns Hopkins Hospital, Baltimore Md.

THE number of individual clinics in operation in any one dispensary varies, of course, more or less directly with the total attendance figures. None of the dispensaries in our series operates less than eight departments, the average being thirteen. Of course there are not so many basic departments in operation anywhere, but the two fundamental branches of medicine and surgery are subdivided to a greater or lesser degree at each institution. As a natural result of various scientific advances of the past few years, the tendency toward further subdivision is still in full swing, and may be expected to continue for some time to come. The divisions common to all of the institutions studied are:

General medicine
Gastro-intestinal
Syphilis } Dermatology } (either separate or combined)
General surgery
Orthopedic surgery
Urology
Ophthalmology } Laryngology } (either separate or combined)

while further refinements in less general use, are clinics for:

Pulmonary diseases
Metabolic diseases
Cardiac cases
Protein sensitization clinic } Asthma cases } (either separate or combined)
Occupational diseases
Pediatrics
Neurology
Rectal surgery
Plastic surgery
Dental surgery
Obstetrics } Gynecology } (either separate or combined)

Of these, the latest additions are the cardiac, metabolic, asthma (protein sensitization) and occupational disease clinics. One or more of these has been developed in almost all of the dispensaries studied, and indications are that the next few years will see their general establishment in all the larger out-patient departments. They require, of course, staffs of specialists in these disorders, and such men do not exist outside of the larger medical centers. That such clinics will ever be called for in the smaller dispensaries is not to be expected; their development in the larger institutions is but a natural response to the increasing need for them. When first introduced, each new clinic is operated, as a rule, but once or twice weekly, additional sessions being arranged when the number of patients warrant.

During the past twenty years the dispensary history has grown in size and scope in a truly remarkable manner. Whereas, the old fashioned history occupied a single line in a large ledger, the modern one comprises many sheets, or cards, and gives a very excellent account of the patient's medical experiences from the time of his initial visit. To accomplish this, the histories of all departments must be filed together in a single folder. The antiquated and very unbusinesslike method of having each department file its own histories, thus remaining in ignorance of what examinations in other departments have revealed, and thereby keeping its own information entirely to itself, is fast passing out of fashion. Yet it is surprising to note that what had only just been done away with in one, was about to be discarded at another, and was still flourishing, with no evidence of any impending demise, at a third of the dispensaries visited. By another decade, let us hope that such a method will have passed away entirely, having been supplanted by that very marked evidence of progress, the unit record system. This was in successful use at one of the institutions studied, and is shortly to be installed at another.

In this connection, it may be observed that a record partly typed and partly written by hand is, to say the least, an incongruity. With the most general adoption of the unit record system, the necessity for having the dispensary sheets typed as well as those prepared in the "house," will become more and more apparent. Quite apart from the increased neatness of such a history, it eliminates a very great defect, illegible handwriting. The dispensary physician who is accustomed to struggle with the scrawls of predecessors whom he has never seen, not to speak of those of his co-workers, can readily appreciate what a boon this is.

History record cards differ in size from about five by eight inches to that of a standard sheet of typewriter paper eight and one-half by eleven inches. The average size is about six by ten inches. The headings at the top vary much in number, from a minimum of eight, to a maximum of eighteen. The irreducible minimum seems to be:

Name — Age — Sex
Address — Race (Color) — S. M. W. D. (single, married, widowed, divorced)
Occupation — Birthplace

While additional headings covering names of employer, parents, or nearest of kin, hospital history numbers, wages, number of dependents, and other information are sometimes added. Clinics in which special attention is given to the social service side naturally go rather deeply into the subject of dependents, wages, and other data thereby gaining an excellent knowledge of the economic status of the patient and making comparatively easy an

*Part II of Dr. Goddard's article. The concluding installment of the series will appear in the August issue.

accurate estimation of what he should pay.

Other history card headings used in certain clinics of some institutions are in the form of printed outlines of history and physical examination findings of the "question and answer" type. A very highly developed example of this was met in the medical department of one dispensary. In general, however, this type of history seems to be losing favor, and is apparently scheduled for oblivion. The chief objection is that no form can be prepared which will adequately cover all emergencies. It is better, therefore, to leave the card blank, allowing the physician to devote as much or as little space to any one item as is indicated for the individual case, rather than pin him down to two lines, or half a line, on that particular subject.

In connection with the matter of history preparation, we may discuss a practice in vogue in certain dispensaries, which should commend itself to general use. It is that of requiring the individual physician to reread all of his dictated or transcribed notes in every case under his charge. This is an onerous undertaking, not so much for the doctor as for the clerical staff, who must draw from the record room and have ready for his perusal, all histories upon which he made notes at his last visit. With the machinery available at the average dispensary, it is impossible. When an adequate secretarial force exists, however, it is a most useful procedure as it practically eliminates the clerical mistakes which are bound to occur when histories are dictated to stenographers or typed upon cards from "temporary" sheets penned by the doctors themselves. Both systems are liable to considerable error, the former through misunderstanding of spoken words, and the latter through inability on the part of the typist to read the written ones. But when the original author reads and corrects all notes they become as nearly correct as it is possible to make them. A few minutes given to this duty before he begins seeing patients for the day, are all that is required on the part of the author to effect an improvement, the advantages of which cannot be overestimated.

The usual custom is to keep each history of one or more cards or sheets in a special folder, bearing that history's serial number. When a history is called for, the folder does or does not accompany it, according to the usage of the particular clinic. Some dispensaries file their history cards without folders, but such are in the minority. The common method of fastening the various sheets of history together is by a wire clip. Unfortunately, this permits the histories of two individuals, or portions of such histories, to become united under the same clip, after having been removed from folders and piled up for distribution to various clinics. Thus, one clip may be found to join together John Jones' medical history sheet and Mary Johnson's obstetrical record, the rest of Mary Johnson's history being discovered in its proper folder, at the end of the day. The practice of sending folder with history eliminates almost entirely this danger. When folder is removed from file, an entry must be made on some form of "locater card," bearing that history number, as to the department or individual to which the history is being sent, so that it may readily be located in case it is not returned.

The locater card ordinarily remains in the folder with the history, until the latter is removed to be sent out to clinic. When folder is not sent out, a slip with date, history number and clinic, is placed in it when history is removed and remains there until it returns. The general practice is, of course, to prohibit patients handling or reading their histories. One dispensary, however, not only entrusts each patient with his own history to carry between file room and clinic (thus saving the cost of orderlies for this purpose) but no locater card or other record is used to locate histories absent from the file. Either Providence watches over that dispensary with an especially careful eye, or they lose an unconscionable lot of histories.

Every hospital out-patient department acts as a feeder to the hospital of which it is a part. In past days, the in- and out-patient departments have not worked in sufficiently complete accord. It was not that discord existed, but because the records of one were not readily enough available to the other to be really helpful. Thus, patients admitted to hospital from dispensary came with but a word or two of diagnosis. In consequence, all the interesting observations covering the onset of the disease were missing. Should the intern have the energy to seek the records, the dispensary history itself was only too often incomplete.

Three of the nine institutions studied have overcome this very serious difficulty, one by the introduction of the unit record system, and two by instituting "refer" cards from dispensary to "house" and "house" to dispensary. These cards bear all points of interest in the history and examination of the patient summarized up to the time of transfer from dispensary to hospital and vice versa. If accurate statistical studies are to be attempted and complete observations made, the introduction of some such system in all up-to-date dispensaries is imperative. In those institutions where complete dispensary records are sent to the house and vice versa, loss of some of these is inevitable. The use of summaries especially transcribed upon a new card for the purpose, obviates this loss.

In the matter of proper balance between house and dispensary activities of out-patient and resident staffs, most of the institutions on our list (such as are associated with hospitals) offer the out-patient staff but a meagre foothold in the hospital proper, and the resident staff, in turn, is but slightly concerned with dispensary affairs. Thus, the interns on certain house services may be required to serve a term in the out-patient department, but this service is more than likely to be unattractive. For instance, it may involve the care of "old patients" only, thus robbing the fresh graduate of the most helpful training which a combined out- and in-patient service offers, namely, that of seeing a new case in the dispensary at his first visit and of following him onward through his entire period of hospitalization.

Or again, we may have the opposite extreme, as exemplified by an out-patient service which is handled by interns entirely, with little or no assistance from senior men, either visiting or resident. Here the intern is denied the criticism and advice of elder and abler men without which he cannot expect his own judgment to mature. Our series offers examples of both the types just described, but the more general tendency is, fortunately, toward a more or less evenly balanced expansion of dispensary staff into the hospital proper, and of house staff into the dispensary. It is evident that the out-patient staff, in order to have its service bear its fullest fruits, must have a wider entree into the "house" than has been offered it in the past. The helpfulness of following a case from first visit to dispensary to day of discharge from ward, holds good for the senior dispensary physician as well as for the youngest intern. To make such continuity of observation possible, active steps must be taken not only to open the wards to the out-patient staff, but to see that this staff actually visits the wards, through the medium of special weekly rounds, or otherwise. Conversely, the intern's dispensary service must be made something more than a mere drudgery. But in order to make his work interesting, it is not necessary to turn him loose upon his own resources.

OCCUPATIONAL THERAPY AND REHABILITATION

Conducted by NORMAN F. BURNETTE, Canadian National Committee for Mental Hygiene, 102 College St., Toronto, Ont., and MRS. CARL HENRY DAVIS,
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OCCUPATIONAL THERAPY PIONEERING IN CHINA*

I. THE "LITTLE FACTORY" AT THE CHURCH GENERAL HOSPITAL

By HELEN C. BLISS, Church General Hospital, Hankow.

THE beginning of our occupational therapy work was through a small beggar-boy in St. James' Hospital, Anking.

After some nine months' treatment for his defective heart, he improved sufficiently for discharge but was not cured. One fine day he sat out on the grass, sunning his rags. The next day he was again to wear those rags, take his bowl in his hands and return to begging. The ill nourishment, exposure and fatigue would undoubtedly bring him back to the hospital in a few weeks with a return of his disease. The work of the hospital would be wasted, and it would all have to be done over again. Miss Tomlinson came to see me and said she just could not see him thrown out on the street. She herself was supporting and educating all the boys she could afford to. Could I do anything to help this boy? If she would give me three days to think, I promised her I would teach this boy to do something whereby he could earn his living. I do not believe in just handing out money.

The Place-Card Inspiration

I remembered that when a tourist in China a few years before I was unable to find place-cards. Hongkong, Canton, Shanghai, Tientsin, Peking, seemed all to have nothing of the sort. Why not make place-cards? "Well," said Miss Tomlinson, "if you think you can teach a beggar who does not know how to hold a brush in his hand to be an artist, you can do more than I think you can. But, anyway, I'll send him over to you, perfectly clean."

I had a friend who could draw, so I demanded a design from her, as I can't draw myself. As we drank tea she looked at her tea table and saw the first design, a Chinese cash piece. Dr. Bliss invented a turn-table, and with great labor we produced a likeness of a cash piece, the size of the first cash made in China. It had a black rim and black characters on tinted paper.

Fifty dozen were immediately ordered from Shanghai, and a real business begun. Then my cook, who had been watching these proceedings, told me that I was doing it all wrong. They could have a woodcut of the design made on the street and I could have the cards printed, saving much time and labor. In time we got a small printing press and the work has developed steadily. With a design printed in, anyone can be taught to paint in the flat colors, provided only that he has enough fingers to hold a brush.

Beggars Move With Hospital

Other sick boys were added and the work grew. Three years ago when I told Miss Tomlinson that Bishop Roots had asked Dr. Bliss to come to the Church General Hospital as superintendent of the men's department, and had made the need seem too great to allow the doctor to refuse to come, she gasped: "What then will become of Sze Dze?" Bishop Roots was not exactly enthusiastic over the idea of importing beggars to Hupeh, but he endured it, and when the junk pushed off from the alleged bund at Anking bound for Wuchang with our household goods on board, it carried on top two grinning Chinese boys and a black cat.

The black cat got lost on the way, but the beggars arrived in splendid spirits. We brought along our printing-press, blocks, paper and other equipment, but left the bulk of the profits, a sum of $150 (Mex.), to St. James's Hospital.

Our first Wuchang worker in the factory was a T.B. hip case, and he well illustrated the possibilities of occupational therapy. He was a soldier. He had undergone two serious operations, and had on many occasions seemed so far gone that Dr. Tsiang had given night orders as to what should be done when he died. His legs seemed quite useless. Without legs, how could he return to the army? How could he get a living if he could not walk? Better to die than live under such impossible conditions. Day after day, he lay with "his face to the wall"; no friends, no interest in life, hopeless.

Dr. Bliss asked me to give him work. I left three place cards of a design easily worked out and told him I would pay him a double copper if he would cut them out for me. It took him all day to do it, as he had to lie flat and was very weak. I asked him if there was anything he would like to buy with the copper and he said he would like an apple. But when I saw him next day he still had the apple, for he had not eaten it. He said he just wanted to look at it and smell it. They grew apples where he lived when he was a little boy. I took the work to him and paid him off every day for the first three weeks or so. Gradually it dawned upon him he was doing something that earned money. Not much, of course, but—all at once he realized that when he was stronger, he could do more work and that meant more money, enough in fact, when he got well, so that he could support himself. He need not worry about how he should get his living. The change in him and the improvement was marvelous to see. Presently he was

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able to get about on crutches and come to the factory for his work. Then after some months he was able to discard his crutches. Later, he heard of a vacancy on the servants' staff of the hospital and he applied for the job. For over a year he worked faithfully and was happy at his work. His sunny smile was nearly warm enough to heat the fireless wards last winter.

Now this would be a good place to stop and say "and lived happily ever after." But, as this is the history of a case and not a tale, I must add the appendix. He yielded to temptation and got patients to pay him for his attentions when he knew that this was against the strict rules of the hospital. He was discharged, disgraced, and left with tears streaming, heading, we presume, for the army again. I feel sure that he will come out right in the end, but we may never know. This is an unsatisfactory, bad appendix, and like all bad appendices ought to be cut out. But I leave it to for you to do.

The second case is more cheerful. A young fellow with a foul, ulcerating growth, which made him loathe himself and be an impossible neighbor to anyone, came to the hospital. An extensive operation was required, but he was soon able to get about again. He worked for some time in the factory. Then as his strength returned, he offered to work out his hospital bill by helping the gardener and by grading in the lot at the rear of the building, which at that time was in a bad mess after tearing up incidental to the building operations. When that was finished he was taken on regularly as assistant gardener. He is still at the hospital, having advanced to the post of orderly. He is now able to help others as he was helped and cared for when he required it. And so I could go on telling of the many who have come and gone, always to a higher post in life than they held before their illnesses. A water carrier becomes a plasterer, one with weak lungs is employed on the Canton-Hankow Railway in out-of-door work. At present, we have sixteen on our payroll. Two live in the house and are employed only for making candy. The others live outside in a rented Chinese house or hostel. I employ the wife of one of the one-legged men to act as housekeeper, to cook and keep the place clean. Those living there are either incurables or are still under treatment, going regularly to the clinic for the necessary treatment as ordered by the doctor. Some come from distant towns so that they have no residence here, and are not sick enough to be put to bed in the wards. The factory gives such cases means of supporting themselves while they are receiving their treatment.

We hold classes three nights a week for all who wish to attend. Our Chinese hospital chaplain conducts the classes. The Y. M. C. A. helps by loaning books, abacus, and other necessities. Reading, arithmetic, Bible study, are the stated subjects taught, and many of the hospital's attendants come. They are encouraged to do so. Sometimes by way of variety and to stimulate interest, a stereopticon lecture is provided, or tickets to the Y. M. C. A. movies are supplied the crowd.

Most of the workers are employed in making placecards, etc. We have candy-making because it is more profitable, and we needed the money to provide various improvements and additions to the equipment of the hospital. The wages paid cover living expenses, with a small margin that is for savings. This is very necessary, because unless a man can see how he can profit by being careful, he will not make the effort, and unless he exerts himself he gets no exercise, without which neither muscles nor brains grow stronger.

The success of occupational therapy depends upon making the patient realize, rightly, that in spite of his handicap, whatever it may be—whether he has one leg, or no legs at all, or a side paralyzed, or his hearing gone—he still can do some sort of work quite as well as a perfectly normal man. He must be made to feel that he is really able to contribute something of value to the world's work, and that if he fails to do his part, all the rest of us will be so much the losers thereby. Once he gets this point of view, the cure is accomplished. He holds up his head, his eyes brighten, and his whole attitude and every move show real purpose in life. He knows he has something to give and that he is wanted and needed in life, and is very proud to know that he can earn an honest living.

Bird's eye view of Anking

The Spirit of Missions.

II. TAPE AND TIN CANS

By EDITH STEDMAN, Social Service Worker, Women's Department, Church General Hospital, Hankow.

For the last year I have had two obsessions—one, what possible employment to find for T'ang nai nai, a blind and crippled beggar who has been with us at the Church General Hospital, Wuchang, for over four years and who was

apparently so doubly handicapped that ordinary forms of employment were impossible. The other what to do with all the empty tin milk cans that twinkle like stars in the missionaries' firmament. We ought all either to keep goats or else seek inspiration. Bishop Roots says they used as lingerie ribbon. This success has gone to our heads so badly that we have plunged and are now frantically looking for enough spools to fit up ten more machines for which there are ten elderly widows waiting.

We had another idea—Christmas ribbon can scarcely be

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Pupils and teacher in the Church General Hospital

make excellent telephones, but one fears subscribers would be few and we are not mechanics. In the meantime we appeal to the Missions House for advice.

We at the hospital now think we are finding a way out for T'ang nai nai and for a half dozen other crippled and handicapped patients who no longer need hospital care but for whom we are still morally responsible. We have been experimenting for a year with various forms of industrial work in the wards, beginning last summer with two little footless slave girls whom we taught to embroider Chinese shoes. These we soon found were a drug on the market as every one in China makes her own. This was the first of many mistakes, but the sight of idle, blind T'ang nai nai, the little slaves and two or three other crippled children make us so uncomfortable that we kept trying one thing after another.

Finally someone had the bright idea, why not teach T'ang nai nai to make silk *tai tsz's*, a kind of narrow tape much used by the Chinese and very easy to make? We got an old country woman to tell us where to buy our bamboo stand, the spools we begged from friends and the whole machine was set up at the cost of 1,100 cash (about thirty-five cents, real money). T'ang nai nai took to it with a most surprising and gratifying enthusiasm and as daylight means nothing to her we have difficulty in restraining her from rising in the night to carry on. She is feeling the importance just now of getting out a "rush order" for St. Elizabeth's Hospital, Shanghai, and grudges every minute spent away from her precious *chi ch'i*. It has made a different person of a blind and ignorant creature, who in all probability has many years to live, by giving her a new interest in life and a feeling of pride in her ability to do something well. Of the money she and all the others earn, two-thirds goes to the hospital toward their board and the rest is theirs to buy dough balls or any other little delicacy. Little Sz Ku, one of the slave children, was given another *chi ch'i* and she is making the same kind of tape only wider and in pale colors to be bought here and we depend on last year's supply from home presents, so why not make red and green *tai tsz's* for "the Christmas trade," cheap, strong and attractive. That is that. Three of the smaller children are making a wide cotton tape on a six-penny hand-loom most ingeniously contrived out of a piece of cardboard, a pencil and a bamboo shuttle. The children are young and their products are rather grimy, but boiling fixes that and the tape has many hospital uses.

In addition we have a workroom for about a dozen very poor and very needy women neighbors of ours, who have some slight hospital connection, either through the outpatient department or through a previous stay here. We do anything here from embroidery for a trousseau to trimming a hat. We even struggled painfully for one entire week over a costume for Dr. James. She saw a picture in a fashion paper which she fancied, so putting her anatomical and surgical mind to work she cut the thing out and the rest of the foreign staff, together with our Chinese workroom, struggled to assemble the parts. I only hope it lasts for furlough.

The desirability of suitable work as a part of hospital treatment and as an incentive toward a decent existence seems to need no argument. We now are faced with the problem of where this is to be carried on. Even informal as we are in China we can't have hospital wards turned into dressmaking establishments, and we ought not to have hospital beds occupied by people who are no longer patients and who by their presence are keeping the really sick from getting proper care. The obvious answer for us here where social and charitable agencies are absolutely lacking is to rent a house which can be used as a hospital annex where such people can live and work under medical supervision but otherwise under more normal conditions, with our Mrs. Yang, who has entire charge of our industrial work, as matron. The chance has come to rent half of the house Mrs. Bliss is already using for some of her cripples and we are only hoping that sufficient

funds may be available to carry us along until we are in a position to be self-supporting. Dr. James has been most interested and helpful and we have already had a very

The Spirit of Missions.
Tsang T'ai Po Spinning

generous gift which will enable us to get our start. It is a very interesting job in human salvage and I know of nothing more satisfactory.

EUROPEAN NURSING COUNCIL MEETS

Fifty delegates of the European Nursing Council were present at the annual meeting in Paris, March 12-16, at which time they were the guests of the public health and nursing department of the American Committee for Devastated France on a trip through the devastated regions.

A tour of inspection was made to the Goutte de Lait or milk depot which is run under the auspices of the American Committee and to the Centre d'Hydiene at Tour de Ville where is located the child welfare work and a dispensary conducted by the American Committee. Dr. Valeria H. Parker of the American Social Hygiene Association, New York City, paid a tribute to the nurses and the efficient manner in which the dispensary and baby clinic were run. A bath being an unheard-of luxury in Soissons, it was with much amusement that the delegates inspected the shower baths in the clinic. These were manufactured by the ingenious nurses who had fastened large pails to a cross beam about seven feet above the cement floor and connected them with a piece of rubber hose and a spray.

The delegates were taken by motor cars to Coucy-Le-Chateau where they visited the picturesque ruins and the different barracks of the American Committee which has a center in this district. Miss Evelyn T. Walker, director of the Public Health and Nursing Department of the American Committee for Devastated France, explained the work of her department.

Prominent members of the European Council, who were present at the council meeting included: Major Julia C. Stimson, chief of the U. S. Army Nurse Corps', Baroness Sophie Mannerheim of Helsingfors, Finland, president of the International Nursing Council; Miss Helen Bridge, director of Nursing School at Warsaw; Mademoiselle Mignot of the Florence Nightingale School, Bordeaux; Miss Torrence of Sophia; Miss Lloyd Still, St. Thomas's Hospital, London; Dr. Valeria H. Parker, New York City; Mademoiselle Cecille Mechelynck, director of the Association of Visiting Nurses of Belgium; Miss T. Robinson, Serbia; Miss Newton, director of the Belgrade nursing school; Madame Ivrange of Hungary, and Miss Marion Parsons, president of the council and director of the government nursing school at Prague.

"LITTLE MOUNTAIN STATE" HAS NEW HOSPITAL BUILDING

By ZOE L. HANNA, R.N., Superintendent, King's Daughters Hospital, Beckley, W. Va.

Kings Daughters' General Hospital is situated in Beckley, Raleigh County, W. Va., at an altitude of 2,500 feet, on a knoll overlooking a city of 10,000 people. It has campus of an acre and a half, adjoining the city park of thirty acres.

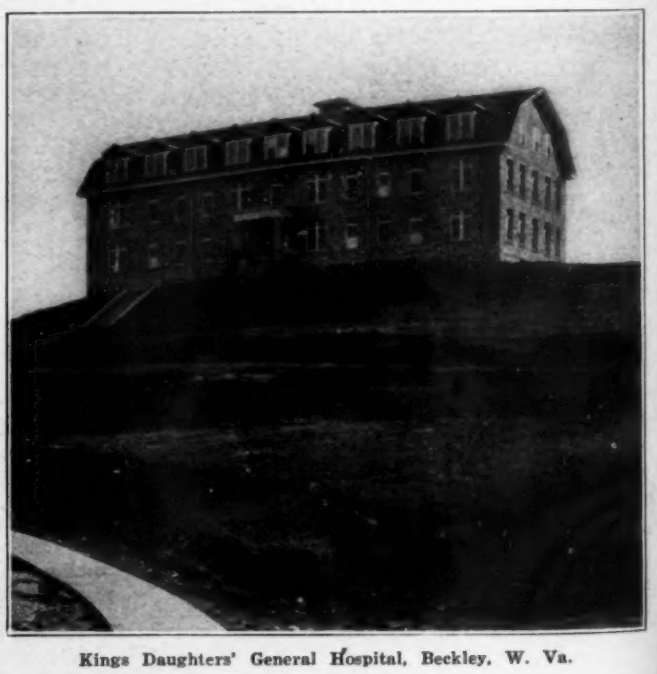
The building has a capacity for 100 patients, is of native stone, four-story, modern in every detail and well equipped. On the first floor will be found the ambulance entrance, wards for male and female colored patients, clinical laboratory, x-ray room, doctors' and nurses' dining room, kitchen, store room, cold storage room and automatic refrigerating plant. The kitchen is large and sanitary and is in up-to-date style. On the second, or main floor, will be found rooms and wards for medical cases, children's ward, main offices, reception rooms, examining room, office of the superintendent of nurses, nose and throat operating and treatment rooms, linen room, nurses' utility room and diet kitchen, and nurses' charting room. The third floor has wards, private and semi-private rooms for surgical cases, bath rooms, diet kitchen, nurses' utility and charting rooms and the operating suite of three rooms, a large operating room of white tiling and Keene cement, sterilizing room and "scrub-up" room. The fourth floor has rooms for the nurses, bath rooms, and a large reception room, with a Victrola and piano. The room is soundproof so that the nurses can dance and have music and the patients below will not be disturbed.

The new building was opened January 1, and a training school started.

Beckley is a progressive little city, in the center of the coal and lumber industry, and is accessible to all surrounding territory.

The hospital has been financed chiefly by Dr. B. B. Wheeler, F.A.C.S., who is surgeon in charge.

Were not this desire of fame very strong, the difficulty of obtaining it and the danger of losing it when obtained, would be sufficient to deter a man from so vain a pursuit.—Addison.



Kings Daughters' General Hospital, Beckley, W. Va.

MEETINGS, CONVENTIONS AND CONFERENCES

TRUSTEES OF AMERICAN HOSPITAL ASSOCIATION ADOPT PLANS FOR NEXT CONVENTION

THE adoption of several important measures relative to the development of the organization marked the last meeting of the board of trustees of the American Hospital Association held Monday, June 4. The text of the resolutions follows: Resolved, that the policy for handling the reports of committees (standing and special) presenting statistical or departmental reports to the 1923 conference shall be as follows:

1. All committees presenting statistical or departmental reports to the conference shall send the final copy to the offices of the association not later than September 1, 1923. Whenever possible, several duplicate copies of the report shall be sent, that these may be promptly placed in the hands of those selected to lead the discussions on the reports.
2. Each report shall be promptly put into type and an ample number of printed copies made available at the conference for distribution.
3. The reports will be formally presented to a general session by the various chairmen, with a few remarks, but without reading. They will be received, ordered printed in the transactions as amended, and referred to the appropriate section meeting for discussion.
4. The reports will also be published in various hospital magazines just previous to the conference, that interest in the subject may thereby be aroused and general discussion thereon made more critical and effective.
5. The committees shall have the privilege of amending or supplementing their reports in the light of the discussions before final publication.
6. The chairmen of the sections shall present an independent program, limited to two papers only, that ample time may be available for important and extended discussion of the technical committee reports referred to the sections.

Note.—It is planned that this policy will permit a greater number and variety of important subjects to be presented and satisfactorily discussed by the conference to the end of producing correspondingly increased amounts of valuable material. It also removes from the general sessions technical discussions in which only a part of those in attendance are particularly interested.

Program Policies Altered

Resolved, That the policies for the programs and general conduct of the sections—that they may cooperate with and contribute to the satisfactory carrying out of the program as a whole—shall be as follows:

General and critical discussions of all reports and perhaps of some technical papers will be referred from the general sessions (in advance and on the printed programs) to the most appropriate sections and made special orders for the time set, that any member may attend any particular discussion desired. Consideration is here given to the facts:

1. That all reports will be distributed in printed form and not read, which means merely presented to the association officially in a general session, with only a few remarks by the chairman, then referred to the appropriate and interested section for real and critical discussion.
2. That attendants at general sessions are not all particularly interested in all the technical reports.

All members on the program (including the general sessions as well as the sections) will be set for a certain hour and this schedule must be observed, that members may go from one section to another to hear particular discussions or papers.

Reports and papers referred from the general sessions to sections for critical discussion and other numbers on the program of the section must be presented according to schedule and long or spontaneous discussions interrupted, to be continued at the close of the scheduled program.

The programs of the sections other than the discussion of the referred reports and papers shall be correspondingly curtailed and adapted to the referred program. This is practicable as the definite assignment of the reports can be available early in the year before definite section programs would be given consideration.

Method of Electing Officers

Resolved, That the election of officers and other formal voting at the twenty-fifth annual conference of the AMERICAN HOSPITAL ASSOCIATION be conducted as follows:

1. Issue official ballots (in blank) to each active personal member and to each properly certified voting institutional delegate at registration as such. One person may properly register and vote both as an active personal member and also on the presentation of proper credentials as the voting delegate from one or more institutional members.
2. The proper possession of those official ballots shall be recognized as the right to vote on all questions decided by the Association by vote throughout the conference.
3. Report of the nominating committee to be made at the general session, Tuesday morning, October 30th.
4. Appointment of official tellers by the president.
5. Votes may be deposited in ballot box at the registration booth any time between the hours of 9 a. m. and 5 p. m., Thursday, November 1st.
6. Votes may be deposited in the ballot box by active personal members or voting institutional delegates personally presenting them upon verification of their registration as such by the tellers.
7. Announcement of elections by the tellers at the central session, Friday afternoon, November 2nd.

Executive Secretary's Duties Defined

Resolved, That the executive secretary be and hereby is authorized and instructed, whenever so requested by any hospital, to undertake the settlement and adjustment of any question arising from the purchase during the conference of any article from any exhibitor at the 1923 conference of the association and to act likewise for any institutional member regarding any purchase from an exhibitor at this conference made during the period between the 1923 and 1924 conferences, the object being to assure to hospitals, and particularly to institutional members, satisfactory results from dealing with those who are permitted to exhibit at the association meetings.

NEW TRUSTEE FOR AMERICAN HOSPITAL ASSOCIATION

The resignation of Miss Mary M. Riddle as trustee of the board of the American Hospital Association was accepted at the meeting of the organization, June 4. Miss Margaret Rogers, superintendent of the Lafayette Home Hospital, Lafayette, Ind., will fill the vacancy made by the resignation of Miss Riddle.

URGE DECLINE OF UNORDERED GOODS

According to a resolution passed at the June 4 meeting of the board of trustees of the American Hospital Association, the practice of sending to hospitals shipments of supplies or equipment on approval or without order is to be discouraged. Steps were taken to urge all hospitals to decline all goods thus shipped.

OHIO ASSOCIATION STUDIES IMPORTANT PROBLEMS AT NINTH MEETING

"IF industry finds it profitable to call its representatives together annually to talk over policies, surely the hospitals of the state of Ohio should find it profitable to gather once a year for the discussion of their problems," said Mr. Frank E. Chapman, director, Mt. Sinai Hospital, Cleveland, O., in opening the ninth annual meeting of the Ohio Hospital Association, held at Memorial Hall, Columbus, O., on Tuesday morning, May 22. Mr. Chapman pointed out that the two-fold purpose of the Ohio Hospital Association was (a) to serve as a medium of expression for the discussion of common problems and (b) to function collectively in the accomplishment of certain ends.

As indicative of the desirability of having a state hospital association, Mr. Chapman cited a few of the state wide problems that still called for solution. Clinical thermometers need to be standardized in Ohio. The State building code is not what it should be, so far as hospitals are concerned. Those who are responsible for carrying out the provisions of the Sheppard-Towner Bill want advice on certain of its aspects. Some phases of the State Supreme Court's decision on the liability of hospitals for the acts of its servants are not altogether satisfactory. The Bureau of Hospitals of the State Department of Health needs guidance.

Forty Percent Change in Personnel

Mr. Chapman stated that during the past year there had been, among the hospitals of Ohio, a forty per cent change in personnel. He felt that this was a serious reflection on the efficiency of the hospitals in the state.

Mr. Chapman's talk was preceded by a brief address of welcome by the Honorable James J. Thomas, mayor of Columbus, and followed by the report of the Ohio Hospital Association's secretary, Miss Mary E. Surbray. Miss Surbray pointed out that our large hospitals usually enjoyed the opportunity of exchanging information. Small hospitals, however, lack this opportunity, and their executives stand in need of encouragement and inspiration, which may be attained partly through the dissemination of helpful information. Miss Surbray pointed out that, of the 179 hospitals in the state, 119 were now members of the association, forty-three superintendents having joined during the year.

Faced with the problem of establishing a system of orthopedic centers in Ohio, the State Department of Health had sought the help and advice of the Ohio Hospital Association. In this connection, a committee of the association under the chairmanship of Dr. Pelton of the Elyria Memorial Hospital, had been at work formulating some of the basic requirements of such a system. Among these requirements, the committee felt there should be special orthopedic service rendered by well recognized and thoroughly equipped orthopedic surgeons, special nursing service rendered by nursing personnel under a person especially trained in orthopedic work, operating rooms especially, although not elaborately, equipped to carry on this special type of work, suitable x-ray and laboratory equipment, a plaster room and suitable open-air facilities.

These orthopedic centers should be so located as to have considerable ground above them with gymnasium equipment, sand boxes, gardens, and other equipment. The committee expressed its conviction that it was exceedingly important to place a woman of high character in charge of the nursing work at these centers, and that the physiotherapy room should be in charge of a capable woman trained in occupational therapy. During their stay at these centers, the children should be given graded lessons by teachers assigned from the public school. The centers should have the services of roentgenologists for the interpretation of the x-ray pictures.

Careful and complete records should also be kept.

Status of Crippled Child in Ohio

Following this report, Mr. E. F. Allen, president, International Society for Crippled Children, spoke briefly on the crippled child in Ohio. Mr. Allen said that the crippled children were getting more attention than ever before because the plan for their care and treatment which had been evolved in Ohio was being increasingly adopted elsewhere. The underlying principle of this plan is to take the facilities for the care and treatment of these children to the children, instead of taking the children to the facilities. Mr. Allen expressed his strong conviction that this important problem cannot be satisfactorily met by building central institutions. Small local centers are being established throughout Ohio as fast as funds and suitable personnel can be provided.

It was Mr. Allen's opinion that most communities can be put in shape for the care of the crippled children by relatively slight readjustments of their present hospital facilities. Mr. Allen gave illustrations showing the number of crippled children in various communities, and pointed out that their needs were not only professional and financial but also human. In other words, it was not only necessary to provide professional talent for their treatment, and financial support for the hospitals caring for them, but also an interest in the crippled child on the part of citizens generally to see that he got the treatment he needed.

Mr. Charles F. Owsley submitted a report of a special committee on the building code. The committee pointed out that while the building code of the state of Ohio was, in the main, excellent, some things had been left out that should be in it, and other provisions forced hospitals to undergo unnecessary, and often burdensome, expense. The report pointed out that hospitals were being constructed in Ohio under varying standards. There was not only a state building code, but many of the larger cities had building codes of their own. The state, however, did not ordinarily interfere with the cities having their own codes. These codes, while not enacted into statuatory laws, were nevertheless mandatory.

No Mandatory Hospital Building Code

From answers that have been received to 160 questionnaires sent out to various hospital superintendents and architects interested in hospital construction, it was learned that no state has a mandatory hospital building code. The New York State Board of Charities, which inspects the hospitals of New York State receiving public funds, expressed the conviction that owing to the varying conditions under which hospitals are constructed a single building code is often objectionable. The committee found that no state has a building code which applies specifically to hospitals. From the answers to the questionnaires, it is evi-

dent that the Ohio State Building Code was too specific in many of its provisions and often necessitated expensive building schemes.

The opinion was expressed that the designing of hospitals should not be restricted by an antiquated building code, and that since hospitals are a growing conception, their construction cannot be reduced to rigid limitations. The report expressed the opinion that hospitals should formulate a hospital building code under which hospitals can be built, not only along scientific lines, but also economically and architecturally attractive.

The committee cited a bill, which has been introduced into the state legislature, for the establishment of a Board of Building Standards, whose duty will be to draw up rules and regulations and keep them up to date as building methods progress. The committee felt that this board, if established, would offer an avenue through which the Ohio Hospital Association could work for better design and construction. The committee recommended that the Ohio Hospital Association cooperate with this Board and the American Hospital Association is developing a proper building code for hospitals.

Round Table on Building Problems

The Tuesday afternoon session closed with a round table on building problems, conducted by Mr. Owsley. In answer to questions relating to the x-ray suite and the operating rooms, Dr. A. C. Bachmeyer expressed the opinion that no definite location can be arbitrarily fixed for any part of the hospital, and that the location of each department is a problem which must be solved in the light of the local situation. He felt that the best way to go about locating the various departments of the hospitals, was first to determine the specific purposes of the hospital, next to outline what functions would get those purposes accomplished, and in the light of these decisions determine the best position for the various departments.

In the discussion of the question as to whether north light is essential for the operating room there seemed to be a division of opinion. Some of the delegates, however, favored the north, since this position kept out the glaring sunlight. The importance of this question was somewhat minimized by the use of artificial light by most surgeons. Dr. Sherman of Portsmouth, O., made a plea for the inclusion of emergency operating rooms in hospital plans, since their presence eliminates a great deal of dirt that would otherwise be carried to the main operating room and at the same time expedites the rest of the operative work of the hospital. Other questions discussed in the round table were the number of operating rooms per unit of hospital beds, the best type of hospital window, and the advantages of a central incinerator.

Care of Mattresses Discussed

The session on Wednesday morning was devoted to two round table discussions and a paper on the past, present, and future of the Ohio Hospital Association. The first round table, devoted to the subject of hospital administration was led by Miss Mary E. Yager, superintendent, Maternity and Children's Hospital, Toledo. The first question discussed was, "What is the approved method of caring for mattresses by small hospitals where live steam is not practical?" There were several responses to this question.

One small hospital hangs its mattresses in the open air and sunlight and then brushes them thoroughly. Another fumigates its mattresses in a fumigating closet and also uses a vacuum cleaner with a special attachment to take out the dust. A third institution keeps a half dozen mattresses in reserve and uses them when other mattresses are being aired on the porch or in the yard. If any of the mattresses are soiled they are cleaned with starch water. An important item in airing mattresses is to have the right type of wooden or steel structure for holding them. It was pointed out that the sterilizing mattresses with live steam, if not properly done, will scorch the ticking and destroy the mattress. Some delegates held that sterilizing mattresses with live steam was not only expensive but wholly unnecessary.

In discussing the question of sterilizing the clothing of new born infants in the hospital, it was brought out that some of the institutions depend entirely upon good washing, preceded by soaking in formalin solution. Few of the hospitals felt it was necessary to sterilize this clothing.

In discussing the question whether in a community which has but one hospital the open or closed staff is more satisfactory, Mr. Frank E. Chapman pointed out that the answer to this question depended somewhat upon one's definition of a hospital. If the hospital is a community hospital it has, in his judgment, no right to shut out accredited and competent physicians in the community. Hospitals, however, should have controlled staffs, whose work and standards will be supervised and passed upon by a board of censors. Any physicians who do not meet the standards set up by this board of censors should automatically be excluded from the hospital.

The point was brought out that while it was easier to operate a hospital with a closed staff by setting up such a staff, such an arrangement makes it impossible to render the community the widest service.

Management of Store Room

Who takes care of the store room in the small hospital? was another question asked. There were various answers. In one hospital the dietitian has charge of the commissary; the head nurse, of the medical and surgical supplies; and the housekeeper, of the general supplies. In another hospital the dietitian has charge of the commissary; the housekeeper, of the cleaning supplies and the young woman, of the general supplies, including supplies for the office, the various floors and the operating suite. When not busy with duties pertaining to the general supplies, this young woman performs other duties in the office. In the third institution the surgical nurse takes charge of the medical and surgical supplies and the superintendent of all the other supplies. In still another institution, the dietitian takes charge of the supplies in her department and in the housekeeping department, while the head nurse has charge of the drug room supplies and the supplies for the various floors.

In answer to a question as to how many hospitals under 100 beds keep an inventory, it was found that about twenty-five per cent of the hospital represented at the meeting did so. It was pointed out that keeping an inventory was one of the fundamentals of good hospital management.

The second round table of this session was devoted to records and record keeping. Its chairman was Dr. C. H. Pelton, superintendent, Memorial Hospital, Eyria, Ohio. Answering a question as to whether the details of the history record should be summarized every twenty-four hours, delegates who discussed this question felt that such a procedure was burdensome. In discussing the question as to whether the supervising nurse or the record clerk was responsible for completing the history before it was taken to the history room; one delegate indicated that in her hospital the attending physician was responsible for completing the record before it was sent to the record

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room. It was his duty to sign the record when it was completed. Before he signed it, however, the intern went over it, as did also the resident physician. When it reached the record room, it was checked by the record clerk.

Responsibility of Records on Physician

Mr. Chapman held that the attending physician should always be held responsible for the records of his patient and that the record should go to the record room at the time the patient is discharged. Mr. Chapman felt that the practice of one of the hospitals in having a record committee of three members of the medical staff go over the records of their departments each month and discuss their deficiencies at the monthly staff meetings, was unwise, and suggested as an alternative that the histories be checked by a physician in no way connected with the attending staff.

The question of how long the medical records of a hospital should be kept, and what parts of the records should be kept, provoked an interesting discussion. One small hospital separated its bedside notes from the physician's records and kept the former only one year. Dr. A. C. Bachmeyer, superintendent, Cincinnati General hospital, stated that that hospital kept records going back to 1860, and that the value of records in court cases influenced him to preserve them. His personal opinion was that records could ordinarily be destroyed after ten years.

The session closed with a paper by Dr. A. C. Bachmeyer on the Past, Present, and Future of the Ohio Hospital Association. In this address, Dr. Bachmeyer pointed out that it might be desirable for the Ohio Hospital Association to draft a program for the development of the Bureau of Hospitals of the State Department of Health. He felt that round tables should increasingly become an important phase of the annual meetings. He made a plea for the elimination of all distinctions between large and small hospitals, contending that the underlying principles of management were identical and merely called for a proper interpretation of these principles as applied to local situations. He urged that the state hospital association establish a closer affiliation with other state health agencies. He also recommended that the American Hospital Association give consideration to the size of geographical sections. He touched on the possibility of Ohio's joining several adjacent states in the formation of a geographical section, since most of their problems were similar and the individual states needed to get their heads together almost entirely on legislative matters.

Hospital Administration Discussed

The opening address of Wednesday afternoon's session was devoted to a brief discussion of the requisites of good hospital administration. It was delivered by the Reverend M. F. Griffin, of St. Elizabeth's Hospital, Youngstown, O. Father Griffin emphasized the necessity of placing the central authority for the administration of the hospital in the superintendent. With the elaboration of the various departments of the hospital there was danger of their heads assuming central administrative functions. Unless the activities of the various departments were coordinated under the supreme authority of the superintendent, there was bound to be confusion.

The second point made by Father Griffin related to the attitude of mind of the superintendent. Superintending a hospital, in Father Griffin's opinion, is a distinct profession and, whenever a nurse or a doctor takes a position as superintendent of a hospital, he or she should change the attitude of mind from that of nurse or doctor to that of superintendent. There should be no divided allegiance. Father Griffin feared that when many nurses became superintendents they did not change their attitude of mind and, to all intents and purposes, remained nurses, rather than hospital administrators. They never grow up to their larger and more important position and, consequently, do not measure up to their new responsibilities and opportunities.

Father Griffin's address was followed by a round table on hospital housekeeping and laundry work. Mr. B. W. Stewart, superintendent, Youngstown City Hospital, acted as its chairman. In a discussion of the comparative cost of operating a laundry in the hospital and of hiring the work done outside the hospital, it was brought out that the work could be done more cheaply by the hospital, quite irrespective of its size. One delegate related that a sixty-five-bed hospital which had spent from $400 to $500 a month for having its laundry done by a commercial laundry equipped a laundry of its own for about $8,000. After figuring six per cent interest on the investment, ten per cent for depreciation, the cost of labor, steam, and the rental of the floor space, the hospital found that it could do its own laundry work at a saving of about twenty-five per cent. Another hospital of 200 beds testified that it was saving thirty-eight per cent.

Value of Special Menus Discussed

The second round table of the afternoon was devoted to dietetics and was conducted by Miss Alice P. Thatcher, superintendent, Christ Hospital, Cincinnati. Discussing the question of whether the hospital should provide special menus for special occasions, Sister Rose Alexius, superior, Good Samaritan Hospital of Cincinnati, maintained that special menus should be prepared for Christmas, Thanksgiving, the Fourth of July and other special occasions, and offered some concrete suggestions for such menus. She felt that the preparation of these special menus should not be regarded as a waste of time, for they had a definite therapeutic effect upon the minds of the patients and often tended to hasten recovery.

The question of whether or not the dietitian should have the privilege of buying her own food supplies or whether these supplies should be bought by the purchasing agent stimulated a lively discussion. Dr. Bachmeyer contended that if the dietitian was doing her job well she would have neither the time nor the inclination to do any buying. She should, of course, have something to say about the quantity and the quality of the food purchased, but her specific task is with the food after it reaches the hospital. One dietitian contended that in answering the questions of what food to buy, when to buy it, and why it should be bought, the dietitian should be given the preference over the purchasing agent, and that the purchasing agent should never be allowed to buy food that had not first received the approval of the dietitian. In answer to the question as to whether there was any advantage in having the dietitian subservient to the superintendent of nurses, the emphatic answer was that under no circumstances should she be subservient. On the contrary, the two should work in harmony, the superintendent of nurses suggesting, but not giving orders where food problems were involved.

There was an interesting discussion of how the dietitian could best give personal supervision of the food from the time it left the kitchen to the time it reached the patient. Mr. Levy, superintendent, Jewish Hospital, Cincinnati, said that at his institution all trays were completely set up at a central station and then taken directly to the patients in carts so constructed as to protect the food from drafts.

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He maintained that under his system he served 120 patients in forty-five minutes, using but two carts, and that the maximum time consumed in going from the kitchen to the patient located farthest from the kitchen was only three minutes. The question was raised as to whether there is a field for social service in dietetics. While the two fields are quite distinct, Dr. Bachmeyer contended that there was a place in dietetics for social service which had hitherto been neglected as, for example, patients on strict diets who are often at a loss to know how to keep up these diets after their discharge. In discussing the question whether any charge should be made for items of food other than those on the menu, several delegates felt that no charge should be made for meeting the individual likes of the patients when within reason.

The opening paper of the closing session on Thursday morning was read by Dr. C. L. Hyde, superintendent, Springfield Lake Sanatorium, Akron, Ohio. It was devoted to a discussion of the function of the sanatoriums in the anti-tuberculosis campaign. Dr. Hyde pointed out that the state is unwilling as a rule to build enough sanatoriums or clinics, and that while municipalities often provided sanatorium facilities, outlying districts lacked them.

Public Interest a Needed Stimulus

Frequently the county sanatorium is part of the county poor house and an effort is often made to see how cheaply it can be run instead of how many patients it can return to society. As the sanatorium is supported by taxation, it is important to keep the public in touch with it. It should be under the control of a board of trustees free from politics and should have a medical staff and resident superintendent who have vision as well as a sound knowledge of the disease.

The sanatorium should be the leader of the community in research work, and its clinical and bacteriological work should not be left to assistants. Relief agents should be made acquainted with its clinics which, in his opinion, should work in close harmony with other hospitals and clinics in the county. There should be enough field nurses to see that patients get needed advice. Their presence make it possible to keep many chronic cases at home, a scheme that need not interfere with the care of patients who can employ physicians.

Following Dr. Hyde's paper there were discussions of the problems of the hospital from the viewpoint of the state department of health, the board of state charities, the nurses examining board. and the industrial commission. The first of the four subjects was discussed by Dr. R. G. Leland, chief, bureau of hygiene; the second, by Mr. Harry Howett, director of child care; the third, by Miss Caroline V. McKee, chief examiner; the fourth, by Dr. Fletcher of the state industrial commission.

Pleads for Better Hospital Records

Dr. Leland made a plea for the keeping of better hospital records and reports as an aid to the better cooperation of the state department of health, and discussed the hospital as a health center where diagnoses of incipient disease should be made by the best men on the medical staff, since more skill is required to detect incipient disease than disease that is perfectly obvious. Dr. Leland felt that the hospitals were not making any progress in public health work by receiving only terminal cases; their construction work consisted in finding cases early and in concentrating upon the patient in cases where there was hope of recovery.

He urged hospitals to serve in the capacity of discoverers of early disease and teachers of the people in matters of health. He regarded the hospital as the logical place to which to bring the community, to collect the professional facilities, and to attack the disease in the beginning. There was no reason, in his opinion, why hospitals should not offer preventive services to the community. Mr. Howett contended that dispensary and clinical services can be prevented from fostering pauperism only if well managed, and outlined a plan on foot of the organization of a state federation of welfare which would include the Ohio Welfare Association, the Ohio Public Health Association, and the Ohio Hospital Association.

Teachers of Nursing Needed

Miss Caroline V. McKee urged nursing schools to prepare in their schools each year one or two teachers of nursing because of the great lack of skillful teachers. She listed poor teaching, too little time for study, too much time to surgery, and inadequate nursing text books among the defects in the Ohio nursing schools. Dr. Fletcher urged hospitals to install uniform methods of keeping accounts.

The concluding paper was devoted to a discussion of the work of the Ohio Public Health Association by Dr. R. G. Paterson, executive secretary.

The following officers were elected for the ensuing year: President, Miss Mary E. Yager, superintendent, Maternity and Children's Hospital, Toledo, Ohio; first vice-president, Mr. B. W. Stewart, superintendent, Youngstown City Hospital, Youngstown, Ohio; second vice-president, Sister Amadeus, St. John's Hospital, Cleveland; treasurer, Dr. E. R. Crew, superintendent, Miami Valley Hospital, Dayton, Ohio; trustees; Frank E. Chapman, director Mount Sinai Hospital, Cleveland, Ohio, and the Reverend A. G. Lohmann, superintendent, Deaconess Hospital, Cincinnati, Ohio.

OKLAHOMA STATE HOSPITAL AND MEDICAL ASSOCIATIONS COMBINE MEETINGS

The Oklahoma State Hospital Association assembled at Tulsa May 15, at a joint meeting with the Oklahoma State Medical Association. The principal speakers present were Dr. C. M. Rosser of Dallas, Texas, and Mr. Robert Jolly, superintendent, Baptist Hospital, Houston, Texas.

Officers elected for the coming year are: president, Dr. Fred S. Clinton, Oklahoma Hospital, Tulsa; first vice-president, Dr. T. M. Aderhold, El Reno Sanitarium, El Reno; second vice-president, Dr. A. J. Risser, Blackwell Sanitarium, Blackwell; executive secretary, Mr. Paul Fesler, superintendent, University Hospital, Oklahoma City; and treasurer, Dr. H. T. Ballantine, chief surgeon, M.V.R.R., Baptist Hospital, Muskogee, Okla.

Dr. R. V. Smith, president of the Oklahoma State Medical Association, appointed the following committee on hospitals for the coming year: chairman, Dr. Fred S. Clinton, World Building, Tulsa; Ralph V. Smith, 610 Commercial Building, Tulsa; McLain Rogers, Clinton; and C. A. Thompson, Commercial National Bank Building, Muskogee.

All service ranks the same with God:
With God, whose puppets, best and worst,
Are we, there is no last nor first. —Browning.

Every person is responsible for all the good within the scope of his abilities, and for no more, and none can tell whose sphere is the largest.—Gail Hamilton.

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NEW ENGLAND HOSPITAL ASSOCIATION HOLDS SECOND ANNUAL MEETING

THE second annual meeting of the New England Hospital Association, a geographical section of the American Hospital Association, was held May 16-17 at the Rhode Island Medical Society Building in Providence.

Dr. Dennett L. Richardson, superintendent, Providence City Hospital, was elected president to succeed Dr. Lewis L. Sexton, superintendent, Hartford Hospital. The following were also elected to office: Dr. Charles A. Drew, Worcester Hospital, vice-president; Dr. Geo. A. MacIver, Massachusetts General Hospital (reelected) secretary-treasurer; and Miss Florence L. McLennan, Portsmouth Hospital, trustee.

Importance of Oil as a Fuel

The sessions of the first day were opened with a brief business meeting at which reports from the various standing committees were read, discussed, and acted upon. Following this the main session of the morning was opened with a paper on fuel oil by Dr. John M. Peters, superintendent of the Rhode Island Hospital, Providence. Dr. Peters first showed the importance of the fuel problem in hospitals because of the severe winters common to many parts of New England and also as a result of the increase of coal prices in recent years. Cost of fuel has been found to vary much even in institutions of about the same size and in the same climate. Accessibility of water power, cost of labor, and such factors exert a great influence on the cost of light and power.

The prevention of waste is a matter of considerable importance, Dr. Peters affirmed. Material savings can be obtained by keeping steam pipes well covered and by such practical economies as the use of exhaust steam under low pressure for heating purposes. Within a few years, the difficulties attending the use of coal as a fuel in hospitals have greatly increased.

The burning of oil in New England hospitals has resulted largely from education in the benefits to be derived. The desirability of oil as a fuel is not in doubt. The great question is one of feasibility and this has to be settled for each individual hospital on the basis of the local conditions. Cleanliness, ease of operation, flexibility, and reduction of labor cost are but a few of the advantages. In determining whether or not any given hospital should install oil burners one must consider the accessibility of the base of supply, the cost of oil as compared with coal, the possibilities of storage, and the distance of hauling. If the supply comes in tank cars, provision must be made for warming the oil at the siding. This is a matter of additional expense.

After this general consideration, Dr. Peters recounted the experiences of the Rhode Island Hospital which has burned oil exclusively since 1916. Labor cost has been reduced sixty to seventy-five per cent, boiler maintenance cost has been lowered, and cleanliness, flexibility, and the possibility of prompt starting of any particular unit nave been attained.

Dr. Frederic A. Washburn, director of the Massachusetts General Hospital, Boston, was the first to discuss this paper. The speaker stated that his hospital had at present five out of its seven boilers equipped with oil burners, and were convinced of the advantages of the mechanical atomization over the steam jet type of burner. The roaring of the latter type had been found objectionable, while the efficiency of the former had proved an added attraction.

Objections to Oil as a Fuel

Dr. Charles A. Drew of the Worcester Hospital said that his trustees had decided against the use of oil some years ago. He presented the objection that had been raised against the use of oil, the objection that had led to the authorities' decision, namely, (1) Supply of coal known —oil not known. Of the estimated available supply, forty per cent has already been used. (2) Coal contract gets coal. The typical oil contract has many unusual provisions. (3) Coal is sold on a reasonable profit basis while the price of oil is fixed in relation to the price of coal. (4) Storage of oil is difficult. (5) Firemen can stoke with coal to prevent smoke and heat loss. (6) Odors from oil burners are objectionable because of the sulphur in the oil. (7) Coal has practically no fire hazard while oil is very hazardous. (8) Coal equipment has been on the market many years and is satisfactory, while oil burners are still in the experimental stage.

Dr. Drew asked that those who had intimate knowledge of the oil burning problem give their opinion on these objections. This was done and the general opinion seemed to be that none of the points raised was of much importance. It was again stressed that fuel oil was desirable and that the main consideration was whether or not local conditions were such that oil could be used more economically than coal.

"The Hospital as a Factor in Rural Community Life" was the subject treated in the paper by Mr. Benjamin Williams, president of the Vermont Hospital Association. Mr. Williams said that the movement from the country to the city is an old one. Lot preferred the attractions of the city life.

For social and economic reasons, New England cannot much longer stand the drain of country boys and girls to the cities. Anything that will improve the status of country living will aid in stopping the movement. The scarcity of doctors and nurses is an important factor in the depopulation of the rural districts. It has been proposed to build country hospitals in order to give the rural inhabitants some of the benefits of the city. Vermont has a law allowing a town to appropriate money toward the support of any hospital in the country, in an adjoining county, or in an adjoining county in an adjoining state. Proctor, Vt., has a small thirty-bed hospital originally built for the care of those injured in the employ of the Vermont Marble Company, the chief industrial concern of the community. This company was the first in the United States to employ an industrial nurse. Mr. Williams told of the part played by this hospital in the community life. It is the only one in the region, and serves not only all the inhabitants of Proctor but also those of the nearby towns.

Automobiles an Important Factor

Automobile transportation is an important factor in enabling a hospital to serve a wide area. Iowa has already developed a scheme of county hospitals. Vermont has at present thirty hospitals. Fifteen more would be of inestimable value in providing much needed facilities for the rural sections. The rural problem is particularly

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"So simple that we know we sterilize"

(The superintendent and the surgical nurse were talking—Series XIII)

"Morning, Miss Smith. This is our big inspection day, isn't it? I think we'll start with the sterilizers."

"*That isn't necessary, Doctor, but you can look them over if you want to.*"

"Don't Castle Sterilizers ever go wrong? —And if not, why not?"

"*Possibly, but ours haven't. They were evidently made right, and never have given us any trouble.*"

"But are you sure they're always right? You remember that once we used our old dressing sterilizer for a week with the control valve broken, and didn't even suspect it."

"*Yes, but that was different, Doctor. These sterilizers haven't any complicated valves. Everything is so simple that we understand exactly what we are doing. Besides, I check them over every day myself.*"

"Good! Then I'll report, Miss Smith, that our technique provides a daily check against error and that Castle Sterilizers are the best investment we have in the surgery."

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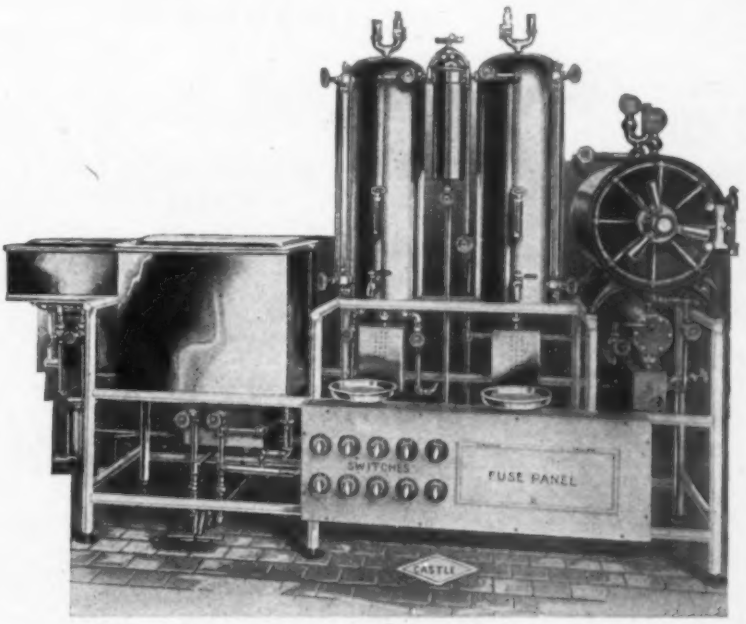

Battery of Castle Electric Sterilizers at Littleton Hospital, Littleton, N. H.

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pressing in Vermont since the state has a population of only 265,000, with 248 towns and cities the largest of which has but 125,000 inhabitants.

Dr. George H. Stone of the Eastern Maine General Hospital, Bangor, opened the discussion, telling of the part played by the hospital in educating the country physicians, in giving them an opportunity to learn modern methods in clinical procedure by attending several times a year, a two or three day clinic at the nearest hospital. The Bangor hospital draws one-third of its patients from the city where it is located, and two-thirds from outlying regions. It serves in large measure five adjoining counties and often gets patients from a distance of 150 to 200 miles from the north.

Other points brought out in the general discussion following were that the country hospital does not reach out in an educational way to the surrounding country as much as it should. If the physicians in rural communities had the possibilities of affiliation and the advantages of hospital facilities in some measure comparable to those available in the city, they would be more willing to serve in the regions where they are so much needed.

Army Plan for Rural Hospital

Again, it is difficult for the rural hospitals to meet the standardization requirements of the American College of Surgeons because they can so little afford to pay graduate nurses, and the nurses do not want to go to these country hospitals. Dr. Bresnahan suggested the adaptation of the army plan to the rural problem, the foundation of outlying stations with limited equipment on the "line" from which the seriously ill could be transported to the "base," a general hospital of fair size. This would serve the towns that are too small to support a hospital of any size.

Dr. Edwin H. Place, physician-in-charge, south department, Boston City Hospital, read the final paper of the morning session dealing with contagious problem of the general hospital. The speaker said that contagion might enter the hospital through an error in diagnosis when the disease was not yet very apparent, yet in its most contagious stage. There might be such an apparent secondary cause for admission that the primary was overlooked. Again, it may be brought in by those in whom contagion has almost subsided, or "carriers." Prevention rests on the thoroughness of the admitting physician. History records may help some but a recent infectious disease is apt to be admitted either intentionally or otherwise. Isolation of all admitted to the general hospital is difficult for economic reasons, though it is now generally done in children's hospitals. Universal isolation for three weeks with an exact list of diseases or contacts is necessary to prevent the admission of those in the incipient stage of contagious diseases. Good facilities after such cases are admitted are of prime importance. The cubicle system had proved of great value and does not add much to the expense.

There is, also, the possibility of visitors bringing in a contagious disease. Obviously there is nothing that can be done to guard against this except the vigilance of the doctors and nurses. Contagious hospitals, according to Dr. Place, should have facilities for the care of the noncontagious patients who have been exposed to contagion, for instance, the man with the broken leg who has been exposed to scarlet fever. Patients rarely get contagion from the doctors and nurses. Workers in the hospital should be taught to report every symptom of disease in themselves. With the present knowledge of immunization methods, there is little excuse for not having all those employed in a hospital protected against diphtheria, smallpox, and typhoid fever. Milk is at present a rare cause of infectious disease in a hospital. Toys, books, and the like, sent in or passed from patients are possible factors, but ones regarding which it is practically impossible to get reliable evidence. "Eternal vigilance is the price of safety as well as of liberty."

Big Problem in Children's Wards

Dr. Place's paper was discussed by Dr. Richardson who said that the problem was greatest in the children's wards because most medical cases in children are infectious. Replies from applicants for admission to inquiries regarding past exposure to contagion must always be accepted with caution, particularly when dealing with the foreign born. The speaker also stressed the importance of small units in babies' hospitals.

The afternoon session of the first day was opened with a paper by Miss Ora M. Lewis, department of syphilis, Massachusetts General Hospital. The paper dealt with the responsibility of the general hospital in the control of venereal disease. Miss Lewis stated that sheltering, feeding, and medication of the patients, were not the sole responsibilities of the general hospital. In addition it should be an institution of learning and should aid in protecting the community against the spread of disease.

Much could be done from both medical and social points of view if more beds were available for syphilitics. Those suffering the later stages of syphilitic infection, while handicapped more or less, offer no hazard as spreaders of contagion. Cases of these types are often accepted in hospitals and such offer a problem for the intern and the social worker. On the other hand, there are those in the primary stages of infection. They are able to work. Their immediate symptoms can be allayed; they are the typical ambulatory cases. The question is, Why use a bed for them? Ultimate cure can be assured if there is adequate treatment. Arsenic and mercury compounds need careful dosage. Then, too, it is not feasible to administer arsphenamine to out-patients oftener than once a week. In a ward case, treatment can be made more often and individual and constant supervision of the period of treatment can be appreciably shortened.

In general, it is the young who have syphilis. They live in boarding houses and eat in public places. It would be much better for the community to have them in wards. Again, the employee often loses his job if long continued treatment on some out-patient department necessitates frequent time off from work. If the employee has once been in the hospital the employer is more willing to allow privileges on the supposition that a man who has been sick enough to be in the hospital should have some consideration shown him. If a patient is perfectly able to carry on his work, the employer is not so apt to see the necessity for a long drawn out course of medication.

Pregnant syphilitics need hospital care. Pregnancy often carries with it kidney disturbances that are aggravated by indiscriminate antisyphilitic treatment. For this reason as well as for the sake of the fetus, bed care is needed. The door of the hospital is closed to the syphilitic infant who needs attention. Any general hospital should, according to Miss Lewis, be willing to accept older children with congenital syphilis.

Cases Needed for Instruction

Moreover, the interns in hospitals where no syphilitics are admitted may serve their entire time and not see a case of syphilis. For instructional purposes, hospitals need to admit these cases. The Peter Bent Brigham Hospital has done this for years and has never had a spread of infection.

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There is also an even greater prejudice against accepting a case of gonorrhea in the open ward than there is against accepting a case of syphilis, and many hospital charters prohibit the treatment of the venereal diseases.

In the discussion lead by Dr. Drew, it was pointed out that syphilis and gonorrhea were, as Miss Lewis had stated, not always venereal diseases, and that those afflicted with them should have rest in bed and hospital observation. Again, the habits and conversation of men with open gonorrhea were not always good in an open ward, and many mothers are averse to having their daughters train in hospitals where they are brought in contact with people of this type. An informal vote was taken to determine the number of hospitals represented at the meeting which admit venereal disease. This showed that twenty-seven did, against nine that did not.

A round table followed in which were discussed methods of securing endowment funds, methods of securing records in private cases, the number of staff meetings which should be held and the attendance which might be secured. Important questions such as—should the hospital of a hundred beds employ a registered pharmacist even if not compelled to do so by law, should the x-ray department be on a percentage or salary basis, how can those not on the permanent or consulting staff have the advantages of the hospital, how can the difficulty of securing interns in small hospitals at some distance from large centers be overcome, and should members of the staff be allowed to practice other than their own specialty, were also discussed.

The service of the out-patient department to the community was discussed in the opening paper of the second day's session. It was read by Dr. Charles E. Wells, assistant director of the Massachusetts General Hospital. Sir James Mackenzie was quoted to the effect that there were many provisions for the study of disease and its effects in the later stages and after death but that there was little opportunity for such study in the early stages.

Dr. Wells named three functions of the hospital: the care of the sick, a center for instruction in all problems connected with sickness, and the investigation of diseases and the associated problems of poverty, ignorance, and crime. Valuable time is lost by the hospital if an early diagnosis is not made. The out-patient department can, moreover, provide facilities for study and training in early diagnosis. Careful physical examinations are most important, the speaker said, and their demonstration to doctor and patient is an important function of the out-patient department.

Treatment of Patient Comes First

Some interest in scientific study should be encouraged, but nothing should interfere with the best treatment of the patient. Accurate records must be kept. There is no excuse for not recording the information that is obtained. The out-patient department comes in contact with many organizations in the community and these contacts are valuable both for the community and the hospital. The social service is not a detective agency, a collection agency, or a police force, yet it may sometimes offer assistance along these lines.

Dr. Wells' paper was discussed by Dr. William O. Rice, assistant superintendent of the Rhode Island Hospital, and Dr. James R. Miller of the Hartford Dispensary. Dr. Rice told of the work of the Rhode Island Hospital as carried on through its out-patient department which, since 1891, has recorded over a million visits. Dr. Miller stressed the value of instruction in early diagnosis with particular reference to the psychiatrist who has in years past received all of his training in institutions that treat the end product. In relation to the social aspects of out-patient work, those who used to go "slumming" can now find excellent employment as volunteer social workers. All are apt to overemphasize their own projects, however, and the hospital is but one cog in the great community welfare.

The problem of the hospital employee was treated in a paper by Mr. Charles Lee, superintendent of the Waterbury Hospital. To get good help and keep it is the solution of the problem, according to Mr. Lee. Too often we try to get by with cheap labor, but a cheap workman is poor at any price. High grade competent department heads are important. Employees must be shown, that with the board and room, laundry and recreational facilities that accompany their job, the pay does not compare unfavorably with what they might receive in industry; while in the latter position all these things must be paid for from the wages received. Naturally the food and living accommodations must be good, the hours reasonable, and good opportunities for spending the hours off. Employees must have many of these facts explained to them to help them understand that the hospital is not a money making institution. Many seem to have the idea that the average hospital makes a handsome annual profit and, because of this supposition, think that they may as well share it by an increase in wages.

The superintendent should take a personal interest in employees, encourage them to come to him with their personal problems and make it easy for them to save a little of what they earn. Conferences with the employees are of value. If employees are uniformed their work is better, and pride in the job is developed.

This problem of the hospital executive was discussed by Dr. J. F. Bresnahan, superintendent of the Bridgeport Hospital, who told of excellent success with a scheme whereby department heads started at a rather low figure but received a raise every six months till the maximum was reached two years from their appointment to the position. He also stressed the need of having employees leave the hospital grounds when they had time off. The change is good for them. Some hospitals, said the speaker, house window cleaners and porters in damp basements. If the social service department found an out-patient living in such quarters it would call in the board of health without any delay.

Modern Nursing Discussed

Miss Jessie E. Catton, superintendent of the New England Hospital for Women and Children, Boston, talked on some aspects of modern nursing. It has been customary, said Miss Catton, to speak critically of the nursing profession but most of this has been constructive. The so-called shortage of nurses is really a shortage of hospital employees. The campaign for candidates for nursing schools has found both students and teachers opposed. The teachers criticize the long hours of duty, poor housing, food, and lack of recreation. The students have received information from friends in the profession regarding the hardships encountered in training. This condition is now changing for, instead of asking permission of the teachers to address students, the teachers are asking that the students have the opportunities of the nursing profession presented to them.

The public is becoming more and more interested in the problems of nursing and nursing education. A major difficulty is that of providing expert care for people of moderate means in their own homes. Many solutions have been proposed but most of them do not provide the expert care. Miss Catton then discussed the possibilities of the trained attendent and of group nursing, and out-

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lined the advantages that would follow if a group of young nurses under a leader settled in a community with none of them giving full time to a patient unless very urgent. The number of patients cared for by the group at any one time should be strictly limited. They would then receive more attention than it is possible for the visiting nurses to give and at a less cost than that attached to private nursing care. "The basis of nursing is service, human touch, devotion to humane ideals—things not found in the marketplace."

Yale School Aims to Reshape Approach

In discussing Miss Catton's paper, Dr. W. C. Rappleye, superintendent of the New Haven Hospital, told of the new nursing school at Yale. He said that the criticism that the new school was to train supernurses when the greater need was more nurses of the present day type, was not justified. The new school at Yale is interested primarily in reshaping the basic approach to nurses training. There are today about seventy-nine specialties into which graduate nurses may enter, yet there must be a common denominator. The basic courses at the new school will train in hospital and community relationships from social, psychological, and economic viewpoints. The apprenticeship type of training is discarded. This school with its own budget, staff and dean, responsible directly to the university and on an equal footing with any other school, such as law or medicine, belongs in the three-fourths of one per cent of training schools in the country having anything in the nature of university affiliations. There will be plenty of opportunity for the high type of nurse that it plans to train.

The officers listed at the opening of this account were then elected and those attending separated into groups which spent the afternoon in visiting the local hospitals.

NEWS ITEMS

The May meeting of the New York Association of Dietitians was held at the Young Women's Christian Association building, May 21. The program was in charge of Miss Emma Halloway of Pratt Institute. Miss Whitmarsh who is in charge of the personnel at Bellevue was the speaker of the evening. She told of many things which are being done for the employees in that institution in the way of promoting better living conditions and greater content.

The following officers were chosen at the meeting: President, Miss Harriet M. Wells, The Brooklyn Hospital; first vice-president, Miss Eva George, Department Public Charities; second vice-president, Mrs. Ruth Wells, Kings County Hospital; recording secretary, Miss Henrietta Poole, Three Arts Club; corresponding secretary, Miss Mary Quinn, Orthopedic Hospital; treasurer, Miss Inez Reeves, City Hospital.

Miss Quandara Oliver who has been dietitian at New England Deaconess Hospital, Boston, is now chief dietitian at the Children's Hospital in the same city. Miss Charlotte Addison succeeds Miss Oliver at the Deaconess Hospital. Miss Breta Luther leaves the Children's Hospital to be married.

Miss Estelle Banta, recently at Kings County Hospital, has accepted the position of assistant dietitian at Lincoln Hospital, New York.

Miss Mame Porter has been appointed supervising dietitian of the Toronto General Hospital. Miss Porter was at Mt. Sinai Hospital, New York, to assist during the illness of Miss Vance. Owing to a prolonged illness, Miss Vance will not be able to resume work for the present. Miss Leah Schanfield has accepted a temporary appointment at Mount Sinai Hospital.

Upon finishing the course in student training at Mt. Sinai Hospital, New York, Miss Fan Woolston accepted a position at the Woman's Hospital, Philadelphia, and Miss Beulah Jones will remain at Mt. Sinai as assistant.

OFFER SCHOLARSHIPS FOR NURSES

The American Child Health Association announces the intention of offering a series of scholarships for nurses for the purpose of furthering the cause of child health. A sum of money not to exceed $10,000 will be made available to nurses of experience who need broader training in the special field of child care. Awards for the fall courses will be available in August.

Banquet scene showing delegates who attended the second annual meeting of the Pennsylvania Hospital Association which met at Hotel Adelphia, Philadelphia, April 26 and 27. For detailed report of meeting see page 622, June issue.

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MISSOURI ASSOCIATION HOLDS SECOND ANNUAL MEETING

The second annual meeting of the Missouri State Hospital Association was held on May 14, at Hotel Muelbach, Kansas City. The meeting was called to order by Dr. L. H. Burlingham, president, who briefly addressed the assembly. Dr. Burlingham mentioned the fact that during the past year the association had been incorporated under the laws of the state of Missouri and had been recognized by the trustees of the American Hospital Association as a geographical section of that association.

He stressed the need for increased membership with a view toward accomplishing more in increasing the effectiveness of the present hospital and health organizations and in this way to obtain much needed legislation for the improvement of methods of caring for the sick and protection of community health.

The aim of the meeting this year, as well as that of last year, was the bringing together from all parts of the state of all those interested in hospitals for the purpose of visiting them, and of studying the common problems by means of round table discussions. The whole meeting was an informal "get together" rather than a formal convention. Plans were made for a session of next year's meeting to be devoted to the reading of papers on set subjects, and to have one speaker from outside the state. It was also suggested to have a joint meeting with the hospital associations of two or three of the neighboring states.

One of the features of the meeting was a complimentary luncheon given by the Kansas City members. Following the luncheon the thirty members present visited and inspected the various hospitals of the city.

About forty were present at the dinner at the hotel at 6:30 o'clock. This was followed by a round table discussion which was presided over by Dr. Wilkes. Some of the questions submitted were:

(1) What does it cost to train a nurse or an intern based on present day standards and cost?

(2) Is there difficulty in securing help?

(3) Should a hospital be managed so as to avoid a deficit?

(4) What are the advantages or disadvantages of a hospital cafeteria?

(5) Should a patient be sued for non-payment of a hospital account?

(6) Per capita cost per diem.

(7) Charge for special nurses board.

(8) Number of elevators needed for 120-bed maternity hospital.

(9) Amount of liability insurance a 30-bed hospital should carry.

(10) Ward and private room charges.

(11) Would it be economy for a hospital of 30 beds to install and maintain its own laundry? (Present laundry expenses $180.00-190.00 per month.)

(12) What is the major operating cost, minor operating charge—What does it cost?

(13) Do you find that special nurses are apt to advise patients not to pay the hospital charges?

The president appointed the following committee on constitution and by-laws:—Dr. Rush E. Castelaw, chairman, Kansas City, Missouri; Dr. Paul E. Coil, Mexico, Missouri and Miss Mary Burman, Kansas City, Missouri.

Committee on nominations:—Miss Isabel Baumhoff, chairman, St. Louis, Missouri: E. P. Haworth, Kansas City, and Miss Cordelia Ranz, Mexico, Mo.

The following officers for the year 1923 were elected: Dr. Rush E. Castelaw, president, Christian Church Hospital, Kansas City, Mo. Dr. B. A. Wilkes, St. Louis, first vice-president, was re-elected; Miss Pearl B. Flowers, second vice-president, Fulton, Mo. Dr. Louise Ament, St. Louis, was re-elected treasurer. Dr. L. H. Burlingham, St. Louis, was elected a member of the board of trustees to serve for three years. The Board of Trustees for the coming year will be as follows: Dr. Rush E. Castelaw, chairman, Dr. Louise Ament, Miss Isabelle Baumhoff, R.N., Dr. M. O. Biggs, Miss Mary G. Burman, R.N., Dr. Guy L. Noyes, Dr. L. H. Burlingham.

SOCIAL WORK CONFERENCE HOLDS HEALTH DAY PROGRAM

The vital importance of the health elements in social welfare was stressed by Bailey B. Burritt of New York, in discussing the subject of "Disease as a Factor in Poverty," on the Health Day program of the National Conference of Social Work, Washington, D. C. Mr. Burritt implied that the elimination of disease would practically solve the problem of poverty.

"Nothing is of greater importance than health, as a basis for social, economic and indeed spiritual evolution," said Professor Chaddock in his address on "Health—A National Economic Asset."

Many other social aspects of the health program were found throughout the day of crowded sessions, overflow meetings, and active discussions. The relation of the physician to the control of disease in the future was discussed by Dr. W. S. Rankin, health commissioner of North Carolina, under the title of "Unoccupied Fields in Health Promotion and Disease Prevention." "The physician fears the socialization of medicine, thinking of it in terms of group practice, of 'state medicine,' and of organized official control," said Dr. Rankin, yet the physician is truly socialized who uses his resources and knowledge for social constructive ends. The medical man to whom people go for periodic health examinations and for advice on how to keep well is actually working in the field of the private practice of preventive medicine. He is building a bulwark against the depersonalization of the physician; he is throwing out an anchor for the highest type of private practice, in adjustment to the social demands of constructive health work."

Looked at from the community angle, the program presented a significant assembling of current experience in thorough-going community health work, in the symposium on health demonstrations. In communities, where tuberculosis or child health may be the text, or the pretext for the demonstrations, we are finding balanced programs with routine medical machinery integrated with constructive health measures. We are finding the application of known measures to disease control, with an emphasis on local participation, official health leadership, and adequate appropriations for health work.

The program touched the medical field from another angle, namely, that of research. Those discussing the demonstrations made it clear that in spite of these comprehensive efforts there still exists a fund of health knowledge not yet applied. Further, Dr. Park and Dr. McCoy indicated that research was rapidly adding to these still unutilized potential resources of practical health work, and was still digging up devices for practical application. The problem of the workers in the applied field of health is to keep the pace set by research. Indeed, as Dr. Biggs pointed out, with known means for control, during the next decade or two, we may still hope for substantial reduction in mortality and morbidity, as well as a material increase in longevity.

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The further interpretation of medical, nursing and health work from the angle of the social investigator and promoter was covered in the session presided over by Miss Fox, on "The Growth of the Social Point of View." The specific application of health and social measures to rural and negro problems occupied the interests of another session, the field being outlined further from the specific angle of hospital social service in a session arranged in cooperation with the American Association of Hospital Social Workers.

The foreign guests on the program, Mlle. Noufflard and Dr. Ludwig Rajchman, spoke on "Nursing Problems in France" and "Health and International Relations" respectively, each contributing substantially to the profitable character and enjoyment of Health Day.

Finally, the interpretation and intelligent understanding of facts were recognized as important. The significance of the wise application of knowledge to health conservation is paralleled only by the importance of finding ways to create a "will to be healthy." In the mental hygiene session, Dr. White, of Pittsburg, and Dr. Williams, the medical director of the National Committee for Mental Hygiene, in discussing the influence of mental attitude and unconscious mental forces upon individual and community action and interplay, endeavored to bring to bear on social and health problems the information which modern psychology makes available, another largely neglected resource in disease prevention and health promotion.

AMERICAN ASSOCIATION OF HOSPITAL SOCIAL WORKERS CONVENES AT WASHINGTON

THE fifth annual meeting of the American Association of Hospital Social Workers held in Washington, D. C., May 16-23, 1923, was the largest and most enthusiastic meeting in its history. Three hundred ten hospital social workers representing almost every state in the union registered at the association's headquarters. The attendance at the various program meetings varied from 500, to eighty as a minimum number. The reports from the twelve committees, the nine districts, and the psychiatric section brought out in a most striking way the active and widespread participation of the members of the association in the development of its program.

A review of the association's developments shows a growth in membership from thirty-three, at the time of organizing in 1918, to 1,268 in 1923. Two new districts were admitted to membership,—the Michigan District, composed of the hospital social workers throughout the state of Michigan, and the District of Eastern Canada, which covers Montreal, Toronto, Hamilton and Quebec. A conference was called by the hospital social workers of Pittsburgh and Cleveland looking toward the organization of a district to cover western Pennsylvania and Ohio.

Each committee of the Association reported progress and asked permission to continue its work throughout the coming year. The committees are: functions and professional requirements, Mrs. C. W. Webb, chairman; committee on records, Miss Mabel R. Wilson, chairman; committee on training, Miss M. A. Cannon, chairman; bibliography committee, Miss Ida M. Cannon, chairman; exhibit committee, Miss N. F. Cummings, chairman; nominating committee, Miss Edith M. Baker, chairman; committee on interrelationship of hospital social workers and the dietitian, Miss Ida M. Cannon, chairman; ways and means committee, Miss Mary H. Combs, chairman; program committee for the annual meeting in 1924, Mrs. Bess L. Russell, chairman; program committee for the semi-annual meeting (Oct. 1923), Miss Talitha Gerlach, chairman; by-laws committee, chairman to be announced; and the executive committee. The program committee for the semi-annual meeting to be held in Milwaukee in October 1923, at the time of the meeting of the American Hospital Association has practically completed its plan for an interesting program. The committee on the interrelationship of hospital social workers and the dietitian plans a joint session with the National Association of Dietitians at the time of the semi-annual meeting.

The Association placed itself on record as desiring to become self-supporting and agreed to raise, through the districts and membership at large, a sufficient sum not only to cover this year's budget but to provide for a surplus for the coming year.

The reports from the districts and from the psychiatric section were inspiring. Each report cited increased interest on the part of the members through program meetings and round table discussions, and an enlargement of opportunities for service and improved standards. Throughout the reports and the discussions on the program, the need for increased opportunities for training in hospital social work was expressed repeatedly, and the committee on training was urged to recommend some way not only to provide training for new workers but also to afford opportunities for further training for those now employed in hospitals and dispensaries.

At the first meeting of the Association, Miss M. A. Cannon read a paper on the review and forecast of hospital social service, and spoke of the development of hospital social service as a result of the development in medical science, with the growth of specialists, and the recognition of the importance of preventive medicine. In order to fulfill their responsibility, hospital social workers must have more training and understanding of social diagnosis and treatment, and a broader conception of the place of hospital social service in relation to other organizations.

Miss Beatrice M. Gosling, representing the committee on dispensary development in New York, spoke of the part played by social workers in development and operation of health centers.

"We are far younger in the field than you, but we are doing our best to make up for lost time," was the message brought from France by Mme. Noufflard who came from Paris as one of the foreign guests of the National Conference of Social Work. In a paper read at the joint session of the section on health with the American Association of Hospital Social Workers, she related the history of the development of hospital social service in Paris hospitals. In 1914 following a report by a French doctor of the social service work at the Massachusetts General Hospital, this work was instituted in the Hospital des Enfants Malades. When the War began in August, 1914, war work absorbed the efforts of all workers, and hospital social service work was interrupted. In 1917, under the American Red Cross, it was carried on by French workers in tuberculosis, maternity, and children's hospitals.

After the departure of the American Red Cross, Mme. Getting, who had been active in organizing the work in

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1914, secured from the Ministry of Hygiene a subvention for the reorganization of hospital social service work in maternity, tuberculosis, and children's hospitals. Since that time the work has steadily progressed. Now, in May, 1923, twenty-six hospital social services are working in Paris united in one organization. The work is carried on in tuberculosis, maternity and children's hospitals. A section of surgery has recently been added and the service of the organization has been requested to develop social service work in a mental hygiene dispensary.

Work of the Paris Organization

During the last year, 8,105 cases have been taken in charge. One thousand, two hundred and eighty-two children have been placed in foster homes or sent to the country. One hundred mothers have found situations with their babies; seventy-one infants have been put out to nurse under medical supervision; sixty-one infants about to be abandoned were kept by the mothers; 3,645 patients have been directed to tuberculosis or venereal disease dispensaries; 632 patients have been sent to private sanatoriums; 232 patients discharged from sanatoriums have been provided with situations. Doctors connected with the hospitals say that hospital social service has entirely changed the atmosphere of the hospital wards.

Miss Edith M. Baker of Barnes Hospital, St. Louis, Mo., spoke on "The contribution of Hospital Social Service to Health Conservation." She noted especially this contribution in the treatment of tuberculosis, venereal disease, cardiac disease, nervous and mental disorders, disorders of nutrition, and in maternity, infant, and orthopedic work. Through the medium of the hospital, social service work reaches out into the community in ever widening circles, cooperating with all resources to prevent disease and conserve health. Miss Janet Thornton, of the Committee on Dispensary Development of New York, spoke on "The Social Case Method in Health Work."

Miss N. F. Cummings of New York City reported on a study of the result of convalescent treatment of 100 neuropsychiatric patients referred from hospital social service departments in New York City, saying: "The convalescent home with good social service coordination is the most dynamic agent to promote the clinic work. It is the potential means of developing personality which has been disturbed by accident or disease. Through the medium of the well-planned day the patient learns how to live, to know his limitations, and how to meet them squarely." Miss Marie L. Donohue, chief social worker at Boston State Hospital, told of the convalescent home which was started in 1922 in Boston to care for discharged patients from the Boston State Hospital. Among the definite accomplishments of the home, she mentions: "The securing of a part time occupational worker, the making of marketable goods which have actually sold, recreation of various forms, the putting of patients in touch with libraries, churches, and especially a material improvement in the physical and mental health of eight out of nine of the patients at the Center."

Dr. Frankwood E. Williams, in outlining the history of psychiatric social work, traced its origin not to follow-up work in state hospitals, but to the case work at such institutions as the Boston Psychopathic, the Neurological Clinic of the Massachusetts General Hospital, and the Phipps Clinic of the Johns Hopkins Hospital. The most important step in the growth of this work was the organization of the Smith College course for psychiatric social workers which he considers "the beginning in any large sense of psychiatric social work." He foresees the time when all social fields will be permeated by the psychiatric technique and urges further training and preparation for the increasing demands.

Dr. William Healy, director, Judge Baker Foundation, Boston, defines the present day psychiatric approach as the attempt to study relations of cause to effect, first the relations of the inner life of the individual to his resultant conduct; second, the influence of environment on his inner life. The therapy should consist of the modifications of the inner life and the outer circumstances for the betterment adjustment of the individual.

Dr. Francis L. Dunham, psychiatrist consultant to Bureau of Labor and Statistics, Baltimore, in a paper on "Children in Industry," discussed some fallacies prevalent in the field of child labor. The term "child labor" is fallacious, since comparatively few under fourteen are in industry, for the problem is not to keep children out of industry but rather to better the working conditions of minors and to see to their proper placement. Another fallacy is found in the community attitude toward the moron who is superficially classed with the morons in institutions. There is also the fallacy of trying to keep uneducable children in school under the present educational system. He advocates a study of the children, the study to consist of a physical examination with laboratory tests, a mental test, a personality study and a social history together with investigation of living and working environments. Placement under supervision should follow this study and re-examination provided at regular intervals.

Psychiatry and Christianity

Dr. Thomas V. Moore, professor of psychology, Catholic University of America, in his paper on "The Function of Religion in Psychiatry" draws a sharp contrast between the viewpoint of such psychiatrists as Freud and Jung and the viewpoint of the exponents of a thoughtful Christianity, when confronted with the problem of a patient suffering from a psychogenic mental disorder. He does not minimize psychoanalysis, but he warns against stopping with that psychoanalysis and not helping the patient to adjust his conflict in the light of deep religious conviction. Instead of considering Christianity as a "praecox tendency to shut oneself out from the world and live in religious dreams," Dr. Moore forcefully shows that Christianity is essentially the driving force in stimulating work of a social nature and that especially in our western civilization it has created our basic institutions of helpfulness. He urges the necessity for a sound religious foundation in the development of every individual if we are to combat the growth of psychogenic mental disturbances in our present civilization.

The officers and Executive Committee, elected by the association on May 16, 1923, to serve during 1923-24, are: president, M. Antoinette Cannon, New York City; 1st vice-president, Edith A. Howland, Baltimore, Md.; 2nd vice-president, Marion Tebbets, Minneapolis, Minn.; 3rd vice-president, Frances Hostetter, Philadelphia; treasurer, Margaret S. Brogden, Baltimore, Md. New members elected to serve for two years on the executive committee are: Mabel R. Wilson, Boston, Edith M. Baker, St. Louis, Ruth V. Emerson, Boston, Mary E. Wadley, New York City, and Katherine B. McMahon, Boston. Members remaining on the committee until May 1924 are: J. Mabel Kniseley, Toronto, Mrs. B. L. Russell, Melrose, Mass., Helen L. Hillard, Pittsburgh, Ida M. Cannon, Boston, and Mrs. C. W. Webb, Cleveland.

Every noble activity makes room for itself. A great mind is a good sailor, as a great heart is.—Emerson.

BOOK REVIEWS AND CURRENT HOSPITAL LITERATURE

HOSPITAL SOCIAL WORK 10 YEARS AFTER

Social Work in Hospitals, A Contribution to Progressive Medicine, by Ida M. Cannon, R.N., Chief of Social Service, Massachusetts General Hospital[1].

Ten years ago Miss Ida M. Cannon, chief of social service of the Massachusetts General Hospital, wrote a book entitled "Social Work in Hospitals." Now appears a revised edition. During the decade that has intervened, Miss Cannon has seen and has had an important part in a remarkable development of hospital social service. It has become an essential part of good hospital service everywhere and has made for itself a recognized place among the more prominent agencies in the general field of social work. In fact it has become an important factor in bringing about a closer relationship between the hospital and the dispensary on the one hand and the other agencies of the community likewise dealing with problems related to health and social well-being.

In the first six chapters of the book, which deal with the history of the development of hospital social work, the hospital background of social service and the more significant medical-social problems, the author amplifies and brings down to date the material presented in similar chapters in the earlier volume. In comparing the subject matter in the new work treating of the technique of hospital social work with the earlier presentation, one is struck with the values which have come out of the experience of years which lie between. Very noticeable emphasis is placed upon the necessity of personality evaluation in determining what a patient's needs are and what is the best way in which to help him meet those needs. During the last five years, psychology, psychiatry and psychiatric social work have been exerting an increasing influence on social work in general. In that connection we find such expressions as these in Miss Cannon's text: "The hospital social worker must consider not only his (the patient's) physical state as presented by the doctor, but also his mental and emotional condition, and his social status as she can deduce them from the various sources of information open to her." "The psychological elements which the social worker must consider are of fundamental importance." "In the inter-play of physical, economic, and psychological elements, the psychological dominates; hence understanding of the subtle reaction of human nature to circumstances should engage the most thoughtful efforts of the medical-social worker. In this reaction the experience of psychiatry is of immeasurable importance and one of the great contributions to social case work method during the past decade."

In her chapter entitled "Working Together," she states a principle which if adopted not only by hospital social workers but by the hospital world generally would render the hospital and the dispensary much more effective community agents. It is: "The hospital social worker should consider herself morally responsible to foster the conscious interrelation of the hospital and the other social agencies in the community from which patients come." In discussing the organization of hospital social service departments, Miss Cannon sketches the history of hospital social work from the time when in many instances it was something which was done by some agency related to but not completely identified with the hospital, to the present when it is becoming a well-established principle that "a social service department to be most effective must exist as an integral part of the hospital, not as an affiliated agency." Today, though hospital social work is still in the process of developing and establishing standards as to its field and scope, and the training and other qualifications of workers, long strides have been taken in the direction of professionalizing the service and of giving it competent, trained leadership.

In the final chapter, on "The Future of Hospital Social Service," Miss Cannon prophesies that social service departments will, in addition to their primary function in relation to the hospital, the physician and the patient, have a part in the promotion of general social welfare, in social research and in the training of the physicians, nurses, and social workers of the future. If I read Miss Cannon's philosophy aright, I believe she would say of hospital social service, as has been said of the settlement, that it is not only a service, but a point of view.

J. E. R.

1. The Russell Sage Foundation, New York, 1923.

EATING VITAMINES

By C. Houston Goudiss[2]

This is a very pleasant little dose. It contains the interesting story of the development of our knowledge of the accessory food factors, served in popular cafeteria style and well garnished with illustrations of famous men like McCollum, Funk and Hopkins. As side dishes are photographs of famous "calves of destiny" and of delectable articles of food like cabbage, oranges, turnips, eggs, liver and milk. Menus and recipes rich in vitamines form more than half the book; as we read, we wonder what has become of the formerly well-known calories of which we used to hear so much.

The value of a book like this depends entirely on how much the reader knows about the other important constituents of food. It is probably a truism to state that even vitamines have only a relative importance in the normal dietary, and that eating vitamines like eating calories is only one part of the day's nourishment.—S. S.

2. Funk & Wagnalls, New York and London, 1922.

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A SURVEY OF THE FISCAL POLICIES OF PENNSYLVANIA'S INSTITUTIONS

By Henry C. Wright

When Mr. Gifford Pinchot was nominee for governor of the state of Pennsylvania, he appointed a Citizens' Committee on the Finances of the State of Pennsylvania whose purpose was to consider the fiscal system of the state and propose a form of budget. The necessary investigations were assigned to a number of experts, among whom was Dr. Henry C. Wright who studied the fiscal policies and operations of the state charitable institutions and hospitals.

Dr. Wright had already published two reports along this line. He was deputy commissioner of public charities under Mayor Mitchel of New York City and is a trustee of Bellevue and Allied Hospitals. The aim of his inquiry was to determine what means and measures should be adopted in connection with the supervision and operation of institutions of the state to reduce operating cost and to restrict capital investment without lowering the standard of care. Subjects inquired into were food stuffs, method of purchase, control of repairs, and salaries. One can in a short review comment on only a few of the topics considered by the author.

Though the report does not mention by name Dr. John M. Baldy, the first commissioner of the new department of public welfare, nevertheless it pays a great tribute to his social vision and administrative ability, indicating that though no new powers had been granted, yet very distinct advances had been made in the supervision of the care of mental patients, children, and penal and reformatory cases. The department required the installation of uniform bookkeeping by institutions receiving state money, holding that if state moneys are to be appropriated in lump sums the state ought to require a type of bookkeeping that will enable it to know how the money is spent.

Appropriations made on the basis of hospital cost per patient would free the department from concerning itself with any private hospital bookkeeping system, but in Pennsylvania it is customary for the legislature to make grants to hospitals directly and individually; local political interests could be encouraged because it was advantageous for each community to stand well with legislative leaders.

An interesting chapter on colonies might leave the reader with the impression that from twenty to thirty per cent of insane patients should now be placed in farm colonies. Because of the present day difficulty in securing competent attendants such a program is probably inadvisable until economic conditions are more favorable to the hospital administrator. Furthermore, in this period of industrial prosperity it is possible to return to the community, under the supervision of hospital social service, many patients who at other times would remain in the institution and make suitable colonists.

In discussing the importance of returning to the community as many patients as possible, the author indicates the need of social service, but goes further by asserting truly and emphatically that a social service department cannot operate with efficiency unless there is coordinated with it a high degree of efficiency in diagnosing and treating patients. His remarks on manufacturing in institutions are particularly worth reading by those who conceive of mental patients as so many able unskilled laborers.

In the matter of food standards, Dr. Wright is an authority to whom we all gladly defer. He sets forth some of the fallacies connected with the idea that central purchasing is cheaper and better. He recommends an agent or bureau to standardize specifications, to purchase for the departments at Harrisburg, to make other purchases on request of a department heads, and to keep information on file. He would not hamper local purchases of most articles.

Unfortunately, central purchasing agents tend to assume progressively greater authority. If central purchasing must needs be, this outline of the powers and duties of such a department is well drawn. He advocates also standardization of salaries and wages with consideration for the location of the work, stating that an isolated institution finds it more difficult to get workers. We question whether any central authority can be expected to make such a discrimination. Many of us believe that freedom should be given to each institution to apportion salaries from a lump appropriation in such a way as to secure the most efficient organization for the particular locality.

This is an important report for all those who are interested in types of fiscal control and institutional supervision. The casual reader might be misled on a few points, but a student of the subject will be inclined to agree with almost everything that Dr. Wright has said.—S. W. H.

PURPOSEFUL HANDWORK

By Jane W. McKee, Instructor in Kindergarten and First Grade, Los Angeles, California.[1]

In Jane W. McKee's book, "Purposeful Handwork," the occupational therapist of a children's hospital may find a veritable mine of suggestions, and a psychology both practical and valuable.

The simplicity of the projects presented and the low cost of the materials necessary to work them out appeal especially to me. I believe in bringing as much joy as possible to little patients and if the problem is simple the result and joy of accomplishment will be immediate.

Since the child develops by using materials easily procurable and of low cost, there is no need of occupational therapy departments dependent upon the sale of articles made by the children, the making of which is often a detriment to the child's every day development and joyful experience.—E. A. D.

RICKETS

By J. Lawson Dick, M.D.[2]

Dick's book on rickets is timely, as the profession is gradually becoming more interested in one of the most common nutritional disorders in childhood. The author handles the subject well and covers nearly every phase of it although he unfortunately leaves out some of the most recent work on the chemistry of phosphorus which has been done in this country as well as abroad. The chemical blood findings in rickets, according to latest research, differ from those in scurvy, and the conclusion of this in a system on the treatment of rickets seems very important.

The references in the book are not numerous but the author has used good judgment in selecting the most important historical and present-day substantial work. With the exception of blood chemistry, it is quite complete, including even the history of the subject. Chapter twenty-five is of particular interest to public health workers. Chapter twenty-four states that conditions in slum areas tend to rickets. It discusses the relationship of rickets to the national health as well as in the army recruiting

1. The Macmillan Company, New York, 1922.
2. E. B. Treat & Co., New York, 1922.

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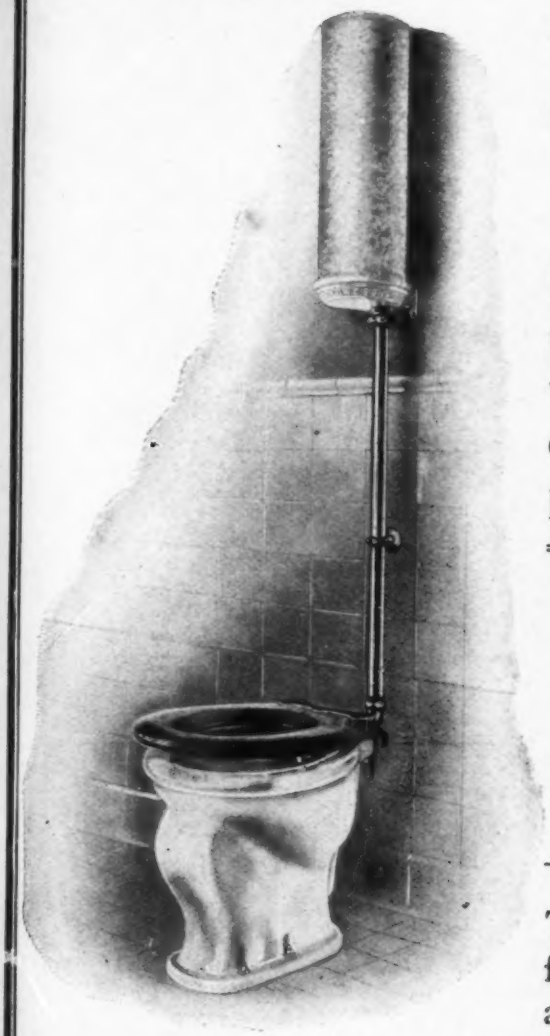
CLOW



Plumbing Facts for Hospitals

How much does water cost per thousand gallons?

Following is a record of an actual test showing difference in consumption of water as used by an open tank closet combination and a Clow (Madden patent) automatic closet combination:

Water Pressure	Clow Automatic Comb.		Open Tank Comb.	
	One Flush	Fifty Flushes	One Flush	Fifty Flushes
At 20 lbs.	2⅜ Gals.	105¼ Gals.	6⅛ Gals.	307½ Gals.
At 25 lbs.	2⅜ Gals.	120 Gals.	6½ Gals.	321½ Gals.
At 30 lbs.	2¾ Gals.	135 Gals.	6¾ Gals.	337½ Gals.
At 35 lbs.	2⅞ Gals.	142½ Gals.	6⅞ Gals.	345 Gals.
At 40 lbs.	3⅓ Gals.	165 Gals.	7 Gals.	352½ Gals.
At 50 lbs.	3½ Gals.	172¾ Gals.	7¼ Gals.	360 Gals.
At 60 lbs.	3 3/5 Gals.	180 Gals.	7⅜ Gals.	382½ Gals.
At 70 lbs.	3¾ Gals.	188½ Gals.	8¼ Gals.	412½ Gals.
At 80 lbs.	3⅞ Gals.	195 Gals.	9⅛ Gals.	457½ Gals.
At 90 lbs.	3⅞ Gals.	195 Gals.	9½ Gals.	472½ Gals.

The above tests are based on operations of each fixture to each of the various pressures, and with a water meter on each pipe, which is sufficient guarantee of the amount of water consumed.

How much do repairs to plumbing cost in one year?

G. M. Badley, of Carroll, Iowa, states that 22 Clow Automatics installed 10 years had cost $2.80 for repairs—less than 1½ cents per closet per year.

That is why

Clow plumbing is used in over 8,000 American Schools—and by nationally known firms like International Harvester, Rand-McNally, Pullman, Sears-Roebuck, General Electric, Armour, Swift, etc.

Use Clow Plumbing in your next installation

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General Offices: 534-546 S. Franklin Street, Chicago

Sales offices in principal cities

records. The author limits his statistics to England, which thing is expected from a British author. Some of the theories regarding food factors in rickets might be challenged by people who are engaged in research on the subject. As a whole, however, the author holds to most of the acknowledged views on the subject.

ENVIRONMENT AND RESISTANCE IN TUBERCULOSIS

By Allen K. Krause, A.M., M.D., Associate Professor of Medicine, Johns Hopkins University; Director Dows Tuberculosis Research Fund, Johns Hopkins University; Physician in Charge, Phipps Tuberculosis Dispensary, Johns Hopkins Hospital; Lecturer, Trudeau School of Tuberculosis; Editor, American Review of Tuberculosis.[1]

This book gives a clear presentation of the relation of environment and resistance to the pathology, diagnosis, symptoms and treatment of tuberculosis, and its subject matter is the elaboration of two lectures given by Dr. Krause and later widely quoted. The record of Dr. Krause's opinion and experience is straightforward, simple and concise. Environment, which is the topic of the first section of the volume, will be of interest to physician, nurse, public health and social worker. The section on resistance will be of keen interest to the professional group interested in tuberculosis.—M. W.

NUTRITION AND SPECIFIC THERAPY

By Dorothy E. Lane B.S.[2]

A series of lectures given by Mrs. Lane were compiled to form the basis of this book. The phases of nutrition discussed include those which are generally recognized as essential in dietotherapy, namely: food materials and preparation, bacteriology of the digestive tract, vitamins, infant feeding, diet in common diseases, and some others not considered essential by all workers in this field. These are discussed in non-technical terms and contain much that is sane and desirable to instill into the minds of those who are thoughtless or indifferent in regard to their health, particularly as it is influenced by food.

The author's ideas regarding the use of meat and milk will not meet with favor from those who believe in a liberal use of protein, as some of the assertions and conclusions are rather positive but not so extreme as vegetarians sometimes make them. Frequent quotations from accepted authorities in nutrition aid in illustrating or proving a point.

In the chapter on reforming intestinal flora, sixteen rules are given which are sensible and easy to follow in the main, though the rule relative to drinking water will be questioned by many.

In the flood of literature on nutrition and dietetics with which we are being deluged, this is one of the books worth rescuing. As a text book, it may not be all that one needs but it will be helpful as a reference. It is a book which is easily read and holds one's interest, though one may not agree with the author's belief in the harmfulness of meat, and with some exceptions, milk in the diet.

RAKE KNITTING PATTERNS

By Bertha Thompson, organizer and director of Occupational Therapy and principal of the Summer School of Occupational Therapy, Woodstock, N. Y.[3]

The booklet, "Rake Knitting Patterns," by Bertha Thompson, presents an interesting and instructive account of what may be accomplished by knitting with various kinds of rakes. It contains twelve chapters which take up in detail the steps in this work including discussions of the tools, instructions for making various garments with different tools, shaping of garments, together with many diagrams and illustrations of the finished products.

Each step in the process is so clearly and simply explained that the ordinary objections and difficulties of rake knitting are reduced to a minimum. Full page patterns are furnished for sweaters, caps, bed-jackets along with eighteen designs for borders in shawls and scarfs, and a number of harmonious color combinations suggested for each design.—M. B.

1. Williams & Wilkins Company, Baltimore, 1923.
2. The Macmillan Company, New York, 1922.
3. The Bruce Publishing Co., Milwaukee, Wis., 1923.

BOOKS RECEIVED

FEVER NURSING. By George P. Paul, M.D., Director, Department of Hygiene and Industrial Health, Antioch College, Yellow Springs, Ohio. Fourth edition. W. B. Saunders Company, Philadelphia.

NURSERY GUIDE. For Mothers and Nurses. By Louis W. Sauer, M.A., M.D., Senior Attending Pediatrician, Evanston Hospital; Formerly Attending Physician, Chicago Infant Welfare, and Assistant Attending Physician, Children's Memorial Hospital, Chicago. Illustrated. C. V. Mosby Company, St. Louis, 1923.

NURSING TECHNIC. By Mary C. Wheeler, R.N., Superintendent, Illinois Training School for Nurses, Chicago. Illustrations Specially Prepared under Personal Supervision of the Author. Second Revised Edition Reset. J. B. Lippincott Company, Philadelphia and London.

THE NEW PSYCHOLOGY AND THE TEACHER. By H. Crichton Miller, M.A., M.D., Editor "Functional Nerve Diseases"; Honorary Director, Tavistock Clinic for Functional Nerve Cases. Thomas Seltzer, New York, 1922.

PHYSICS AND CHEMISTRY FOR NURSES. By A. R. Bliss, Jr., A.M., Phm.D., M.D., Lecturer on Chemistry and Materia Medica, Grady Hospital Training School for Nurses, Atlanta, and A. H. Oliver, A.M., Ph. Ch., Phm.D., Lecturer on Chemistry, Hillman Hospital Training School for Nurses, Birmingham. Seventy illustrations. Third Edition Thoroughly Revised and Rewritten and Conforming to the Requirements of the Standard Curriculum (1922) of the National League of Nursing Education. J. B. Lippincott Company, Philadelphia and London.

HOW WE RESIST DISEASE, an Introduction to Immunity. By Jean Broadhurst, Ph.D., Assistant Professor of Biology, Teachers' College, Columbia University. With 138 Illustrations and Four Color Plates. J. B. Lippincott Company, Philadelphia and London.

ESSENTIALS OF SURGERY, a Textbook of Surgery for Student and Graduate Nurses and for Those Interested in the Care of the Sick. By Archibald Leete McDonald, M.D., Johns Hopkins University, with 49 illustrations. Second Edition Revised. J. B. Lippincott Company, Philadelphia and London.

A TEXT-BOOK OF OBSTETRICAL NURSING. By Alice Weld Tallant, A.B., M.D., Professor of Obstetrics, Woman's Medical College of Pennsylvania; Obstetrician-in-chief to the Hospital of the Women's Medical College of Pennsylvania; Gynecologist and Obstetrician on the Visiting Staff of the Philadelphia General Hospital. Consulting Physician to the Girls' Department of the Glen Mills Schools. Illustrated with 116 Engravings. Lea & Febiger, 1922.

A MANUAL OF OBSTETRICAL NURSING. By Nancy E. Cadmus, R.N., General Director of the Maternity Center Association, Former Superintendent of Manhattan Maternity Dispensary, Former Member of New York State Board of Nurse Examiners, Former President of New York State League of Nursing Education. G. P. Putnam's Sons, New York, 1922.

APPLIED PSYCHOLOGY FOR NURSES. A Textbook of Simple Nursing Procedure for Use in High Schools, together with instruction for first aid in emergencies. By Amy E. Pope, formerly instructor in the School of Nursing, Presbyterian Hospital, New York. G. P. Putnam's Sons, New York and London, 1921.

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